

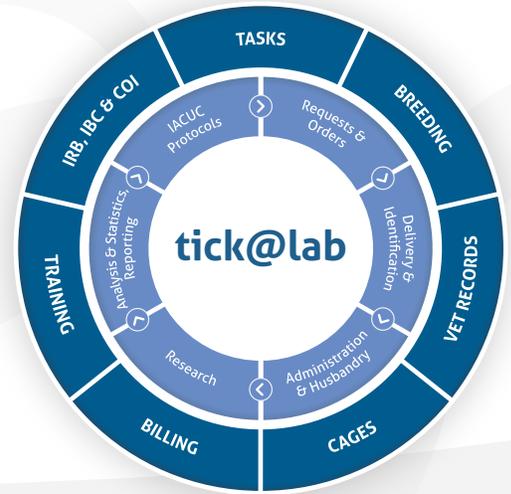


## Research Compliance and Animal Research Facility Management Software

tick@lab is the comprehensive, easy-to-use-and-implement software solution that centralizes and streamlines research compliance and animal research facility management.

tick@lab provides comprehensive coverage of research processes – census/cage management, breeding, administration and husbandry, reporting and documentation, IACUC, IRB and IBC protocols, COI processes, and more in one secure platform.

tick@lab ensures accurate data access and availability across people, processes, and systems, reducing risk and the administrative burdens placed on investigators and research facility teams while saving organizations significant time and money.



### Configure to Your Organization

- Set up master data for consistent data entry
- Construct user-specific dashboards
- Provide role-based access to data
- Tailor user interface labels and grid views
- Design individualized protocol forms
- Digitize forms (templates) for activity documentation
- Create cage cards and custom reports

### Promote Flexibility, Usability, and Validation

- Deploy via on-premises, cloud, or SaaS
- Use with common browsers – no local installation needed
- Access data in real time from any device
- Use built-in features for CFR21 Part 11 and GLP compliance (e.g., audit trail, electronic signatures, more)
- Configurable audit trail functionality

### Support Communication and Integration

- Configure email services for user notifications, reminders, alerts...
- Schedule and assign service requests quickly
- Integrate with industry-specific solutions and systems (Grant Management, Electronic Lab Notebook, LIMS, Study Management, Training, Financial, Cage Manufacturer software, Devices, Animal RFIDs)
- Leverage purpose-built data connectors, APIs, and web services

### Enable Robust Reporting and Security

- Leverage included data mart functionality for analysis and reporting
- Use any reporting tools to create custom reports
- Apply role based user access to ensure confidentiality of data
- Integrate with Single-Sign-On authentication systems (e.g., Active Directory, LDAP, Shibboleth, CAS, etc.)



## IACUC (*Institutional Animal Care and Use Committee*) Management and Process Support

tick@lab streamlines and supports the management of IACUC protocols - from creation and submission by personal investigators, to review and approval by committee members. It overcomes known problems with "traditional" paper-based approaches to strengthen compliance risk mitigation and cross-committee (e.g., IBC, IRB, COI) communication and collaboration. With tick@lab, organizations achieve transparency of humane animal treatment, safe laboratory conditions, and verification of proper training for all laboratory workers.



### Effectively Manage Training Components

- Track and verify completion of required training for all protocol-involved personnel
- Connect to learning libraries (e.g., AALAS, CITI) and related compliance documents (e.g., IBC, IRB, COI)
- Create a catalog of pre-approved procedures with built-in comparison functionality
- Schedule and assign service requests and training tasks to individuals or groups

### Improve Protocol Support and Reporting

- Configure protocol forms to ensure conformance with project and regulatory requirements
- Apply tailored questionnaires, field requirements, and help text to improve accuracy and efficiency
- Generate standard and custom reports to meet regulatory and project-specific requirements
- Enable version control and comparison across protocol documents and statuses

### Ensure Information Accuracy and Access

- Query current and historical data in the protocol history and save filtered views for instant access
- Configure e-mail notifications and alerts to support task completion and on-time actions
- Track and resolve animal welfare issues and streamline post-approval monitoring
- Integrate directly with animal management data for continuous visibility of animal status and numbers
- Create tailored and searchable forms (templates) to document adverse events, Post Approval Monitoring, and more

### Simplify Meeting Management and IACUC Administration

- Track and record committee member votes/recommendations, comments, and issue resolutions
- Set up and templatize full committee meeting agendas for standardization
- Capture member attendance, votes, comments, and meeting minutes in a central location and export as needed
- Configure key workflows to accelerate reviews (e.g., full committee or designated member reviews, VVC, etc.)
- Submit new applications, amendments, annual reviews, and de novo quickly and easily



## IRB (*Institutional Review Board*) Management and Process Support

tick@lab streamlines and supports the management of IRB protocols and processes – from creation and submission by personal investigators, to review and approval by committee members. It overcomes known problems with “traditional” paper-based approaches to strengthen compliance risk mitigation and cross-committee (e.g., IACUC, IBC, COI) communication and collaboration. With tick@lab, organizations improve human research administration and monitoring processes and better ensure ethical compliance.



### Improve Protocol Support and Reporting

- Configure protocol forms to ensure compliance with project and regulatory requirements
- Apply tailored questionnaires, field requirements, and help text to improve accuracy and efficiency
- Generate standard and custom reports to meet regulatory and project-specific requirements
- Enable version control and comparison across protocol documents and statuses
- Add attachments for informed consent, HIPAA authorization, and other items as needed

### Effectively Manage Training Components

- Track and verify completion of required training for all protocol-involved personnel
- Connect to learning libraries (e.g., AALAS, CITI) and related compliance documents (e.g., IACUC, IBC, COI)
- Schedule and assign service requests and training tasks to individuals or groups

### Ensure Information Accuracy and Access

- Query current and historical data in the protocol history and save filtered views for instant access
- Configure e-mail notifications and alerts to support task completion and on-time actions
- Create tailored and searchable forms (templates) to document protocol deviation, non-compliance report, and more

### Simplify Administration and Meeting Management

- Track and record committee member votes/recommendations, comments, and issue resolutions
- Set up and templatize full committee meeting agendas for standardization
- Capture member attendance, votes, comments, and meeting minutes in a central location and export as needed
- Configure key workflows to accelerate reviews (e.g., full committee review, subcommittee review, etc.)



## IBC (*Institutional Biosafety Committee*) Management and Process Support

tick@lab streamlines and supports the management of any type of safety protocol (e.g., biosafety, radiation safety, chemical safety, etc.). It overcomes known problems with “traditional” paper-based approaches to strengthen compliance risk mitigation and cross-committee (e.g., IACUC, IRB, COI) communication and collaboration. With tick@lab, organizations achieve stronger biohazard controls, safe laboratory conditions, and proper training for all laboratory workers.



### Improve Protocol Support and Reporting

- Configure protocol forms to ensure compliance with project and regulatory requirements
- Apply tailored questionnaires, field requirements, and help text to improve accuracy and efficiency
- Generate standard and custom reports to meet regulatory and project-specific requirements
- Enable version control and comparison across protocol documents and statuses

### Effectively Manage Training Components

- Track and verify completion of required training for all protocol-involved personnel
- Connect to learning libraries (e.g., AALAS, CITI) and related compliance documents (e.g., IACUC, IRB)
- Schedule and assign service requests and training tasks to individuals or groups

### Ensure Information Accuracy and Access

- Query current and historical data in the protocol history and save filtered views for instant access
- Configure e-mail notifications and alerts to support task completion and on-time actions
- Track and manage facility inspections and document findings for follow-up and review
- Create tailored and searchable forms (templates) to document protocol deviation, adverse events, and more

### Simplify Meeting Management and Administration

- Track and record committee member votes/recommendations, comments, and issue resolutions
- Set up and templatize full committee meeting agendas for standardization
- Capture member attendance, votes, comments, and meeting minutes in a central location and export as needed
- Configure key workflows to accelerate reviews (e.g., full committee review, subcommittee review, etc.)



## COI (Conflict of Interest) Processes and Management

tick@lab makes it easy to manage any Conflict of Interest type (e.g., PHS, non-PHS) - from creation and submission by personal investigators, to review and finalization by committee members. Recurring problems associated with traditional paper-based approaches are removed and effective compliance risk mitigation is achieved. Additionally, tick@lab improves communication and collaboration with other compliance committees and enables required reporting.



### Strengthen Disclosure Form Processes

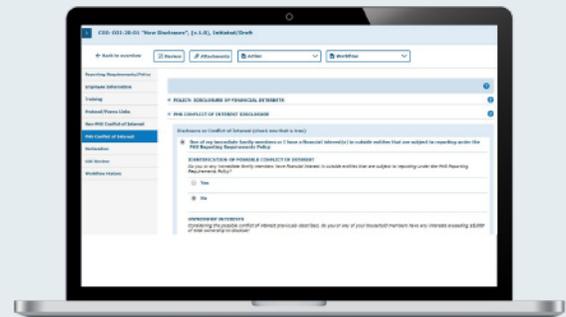
- Configure disclosure forms with ease in order to meet project-specific requirements
- Create tailored questionnaires with mandatory questions, answer formats (free text, nested questions,...), help text, and more
- Configure workflows (e.g., Management Plan Review, Conflict Committee Review, etc.) for greater efficiency
- Submit new applications and amendments quickly and easily

### Ensure Transparency and Information Access

- Connect seamlessly to related compliance documents (IACUC, IRB)
- Use version control to review and compare information and updates
- Query the full range of current and historical data stored in the document history
- Create and save filtered view sets for instant access to frequently needed information

### Simplify Meeting Management and Administration

- Track and record committee member recommendations, comments, and issue resolutions
- Set up and templatize COI committee meeting agendas for standardization
- Capture member attendance and meeting minutes in a central location





## Training and Competencies

tick@lab simplifies training and competencies management and administration. It overcomes the known problems with traditional homegrown or paper-based approaches to improve compliance risk mitigation.

tick@lab brings the documentation, tracking, review, reporting, assigning, and verification of training and competencies together in a single secure system to instill confidence that all personnel are skilled and that all regulatory requirements are satisfied.



### Manage Courses, Procedures, and Professional Development

- Centralize lists of approved training courses, events, competencies, qualifications, experience and procedures
- Capture ongoing professional development, certifications, supportive documentation
- Apply species- and location-specific catalog of pre-approved procedures, methods, and techniques

### Simplify Administrator and Trainee Tasks

- Track training and certification expiration dates and review at individual, team, or facility levels
- Configure e-mail notifications and alerts to support training course completion and on-time sign-ups
- Request, plan and assign training tasks at individual, group, or team levels

### Strengthen Controls and Connect to Related Systems

- Integrate with CITI and AALAS learning libraries and other related training systems
- Integrate with compliance documents and study plans for training and competencies verification
- Define roles and enable secure and confidential access to individual user profiles

### Improve Information Accuracy and Access

- Apply configurable forms (templates) to document activity
- Query current and historical data across all training records and save filtered views for instant access
- Generate standard and custom reports to satisfy regulatory requirements



## Animal Research Facility Management

tick@lab centralizes and simplifies animal research facility management and operations – including animal orders and deliveries, transfers, breeding, capacity management, census, invoicing, billing and more. Individuals and teams gain secure access to the information they need to perform their roles and provide excellent animal care.

In short, tick@lab helps research-driven organizations simplify data management, streamline operations, ensure compliance, and save time and money.



### Enhance Animal Identification and Information

- Establish capacity rules at the cage, tank, and/or room level to set and see real-time occupancy
- Assign individual or batch IDs and markings, plus attach notes and contextual information
- Resolve discrepancies between electronic and physical census with reconciliation features
- Schedule and assign service requests (e.g., enrichment change, transfer, etc.) to individuals or groups

### Streamline Animal Procurement Processes

- Manage animal supplier data with delivery criteria, vendor catalogs, and special instructions
- Configure step-by-step animal order forms to accelerate standing orders and improve efficiency
- Generate and efficiently route animal order lists and delivery documents to vendors
- Create tailored and searchable forms (templates) to document activities (e.g., room monitoring, HVAC assessment, tasks, etc.)

### Improve Colony, Cage, and Tank Management

- Determine and design cage card layouts, sizes and information requirements
- Automate cage and/or tank numbering and workflows (e.g., prepared, active, retired statuses)
- Use cage cards and tank labels with all device types and barcode/RFID scanners, plus print from any printer
- Enhance mobile capability and offline inventory management via Cage Tracker add-on (optional)

### Strengthen Support and Integrate with Ease

- Configure e-mail notifications and alerts to support task completion and on-time actions
- Connect seamlessly to compliance documents for throughput of essential information
- Query current and historical data in the animal history and save filtered views for instant access
- Automate charge collection, generate invoices, and access billing data in real time by PI
- Integrate with other solutions and systems (financial, cage manufacturer systems, devices, animal RFIDs)



## Animal Management *(for all species)*

tick@lab centralizes animal records to provide secure access to the data that individuals or teams need to do their jobs and deliver excellent care. tick@lab allows any activity (e.g., experimental, health, treatment plans, breeding, etc.) to be tracked and recorded directly into the animal profile for searchability, transparency, and simplicity. Its audit trails for animal history records enforce compliance and enable validation against CFR 21 Part 11 and GLP regulations. In the background, tick@lab automatically applies compliance checks, tracks animal numbers against protocols, and captures applicable costs for billing.



### Enhance Controls and Gain Flexibility

- Establish rule-based criteria and apply functionality at the animal, cage, tank, or room level
- Track animals as batches/groups or individuals, plus assign individual IDs and marking as needed
- Automate animal identification and numbering with the provision for multiple identifiers
- Manage and review animal transfers between locations, protocols... efficiently and easily

### Streamline Support and Communication

- Create tailored and searchable forms (templates) to document any activity (e.g., clinical exam, treatment, etc.)
- Collect regulatory reporting information and generate required reports and information on-demand
- Configure e-mail notifications and alerts to support task completion and on-time actions
- Query current and historical data in the animal history and save filtered views for instant access
- Schedule and assign service requests (e.g., surgery, transfer, etc.) to individuals or groups

### Improve Animal Information Access and Capture

- Automate animal status changes (acclimation, veterinary approval, wash-out periods, etc.) with configurable workflows
- Flag health issues, request veterinary checks, and attach contextual notes and documents
- Record key animal characteristics and review progressions over time
- Track complete animal life cycles and milestones in real time and generate detailed event chronologies

### Strengthen System Integration and Efficiency

- Determine and design cage card layouts, sizes and information requirements Use cage cards with all device types and barcode/RFID scanners, plus print from any printer
- Integrate with other solutions and systems (Electronic Lab Notebook, LIMS, study management, cage manufacturer software, devices, animal RFIDs)



## Breeding Colony Management and Process Support

tick@lab simplifies the complexities of breeding colony management. With support for any species (including aquatics), users can securely update and access animal data in real time on any device. Alerts and task requests enhance animal care and stakeholder communication while tick@lab's powerful management capabilities (e.g., nomenclature recording and generation tracking) ensure transparency and accuracy.



### Accurately Manage Your Colonies

- Create strains with complete construct information and the possibility to restrict access to selected teams
- Define parental constellations for automatic offspring assignment
- Automate generation recording for offspring
- Derive new strain definition from crossing
- Manage an optional gene/allele database with automatic link to the JAX MGI database

### Effectively Manage Activities at the Animal or Cage Level

- Schedule and assign service requests (mating, genotyping, transfer...) to individuals or groups
- Automate animal identification and numbering with the provision for multiple identifiers
- Gain flexibility in mating management, record plugs found, new litters, weanings and automate genealogy trees
- Enable animal genotyping including sample list exports and the import of results plus integrate with external lab systems, and service providers (e.g., Transnetyx)

### Streamline Breeding Process Support and Administrative Activities

- Derive new strain definitions from crossings quickly and easily from the parental strains
- Enable the capture of breeding activity costs and accelerate billing processes
- Automate compliance checks and track animal numbers against protocols
- Flag health issues, initiate veterinary check requests, and attach notes and documentation to animal records

### Support Accuracy and Standardization

- Create templates for activity documentation and import data from other applications
- Configure e-mail notifications and alerts to support task completion and on-time actions
- Track and query complete animal life cycles in real time and generate detailed event chronologies
- Generate standard and custom reports to assess performance and satisfy regulatory requirements



## Aquatics Management and Process Support

Aquatic species such as zebrafish have become an important component of biomedical research. While most software tools for managing laboratory animals and facilities are designed for mice, tick@lab provides specific functionality for managing aquatic species. Better yet, these functions are seamlessly integrated with tick@lab's core features for handling virtually all aspects of research compliance and animal operations.



### Enable Flexible Tank management

- Track individual animals or groups as required to meet project or facility needs
- Automate tank capacity checks across user-defined tank types
- Transfer, split and merge tanks efficiently, plus track tank positions (optional)
- Determine and design tank label layouts, sizes and information requirements
- Use tank labels with all device types and barcode/RFID scanners, plus print from any printer

### Improve Animal Identification and Care Processes

- Automate animal identification and numbering with the provision for multiple identifiers
- Apply "profile" pictures for secure identification by phenotype
- Flag health issues, request veterinary checks, and document animal exit points
- Track complete animal life cycles in real time and generate detailed event chronologies

### Streamline Breeding Process Support and Information Tracking

- Manage breeding events at a single or multiple tank level
- Record clutch size, number of fertilized eggs, fertilization rate, and other key characteristics
- Enable complete tracking of animal genetics and genealogy
- Schedule and assign service requests (e.g., genotyping, transfer, etc.) to individuals or groups

### Support Accuracy and Standardization with Configurable Forms, Templates, and Reports

- Create templates for activity documentation (e.g., health, treatment, breeding, etc.) plus help text
- Generate standard and custom reports to assess performance and satisfy regulatory requirements
- Configure e-mail notifications and alerts to support task completion and on-time actions
- Query current and historical data in the animal history and save filtered views for instant access



## Task, Case, and Study Plan Management

tick@lab streamlines and simplifies task, case, and study plan management to reduce clerical burdens, save time, and support project excellence. Its powerful features help teams and stakeholders document, assign, schedule, monitor, review, update, and report on any type of activity across every phase of a project. Best of all, tick@lab brings everything together in a single and secure location.



Task	Object type	Object ID	Resources	Due date
Viewing	Breeding animal	000294	Breeding Services Team	05-May-2020
Enrichment change for Wolf (Change Task)	Batch	00012-00018	Research Team 2	28-Apr-2020
Location Transfer	Batch	00012-00017	Research Team 2	30-Apr-2020
Room Checklist (Daily Room Check)	Animal Facility	Dog Room 1	Lab Animal Science	29-Apr-2020

### Streamline Task Management

- Schedule and assign tasks or service requests to individuals or groups
- Centralize task management and get dashboard access to view and update task statuses and assignments
- Set up task recurrences and combine with templates to drive efficiency
- Assign tasks to protocols, users, animals, facilities, or as free tasks
- Automate history updates upon task completions or status changes (e.g., new, in-progress)

### Simplify Case Management and Creation

- Construct cases as a series of tasks (e.g., treatment plan) that can be accessed, updated, and monitored on-demand
- Create cases from scratch or use pre-configured case templates as starting points
- Quickly search across all case and task parameters to get needed information, plus create preset filtered views
- Assign cases individually or with multiple animals at once

### Create Study Plans Efficiently

- Configure workflow to optimize study plan creation, execution, and connection to compliance documents
- Connect or combine all pertinent experimental information in one central location for all users
- Plan, schedule, assign, and adjust all experimental tasks of an approved animal research project quickly and easily
- Generate and custom reports to analyze data and assess conformance to requirements

### Design and Configure Forms (Templates)

- Define field types and min/max values to improve data capture (e.g., dates, numerical, free text, drop-down list, etc.)
- Connect drop-down lists to the master data catalog plus set optional vs. mandatory field requirements
- Apply electronic signatures to streamline and capture approvals and verifications electronically
- Combine forms with tasks to document activities, provide instructions, and ensure consistency



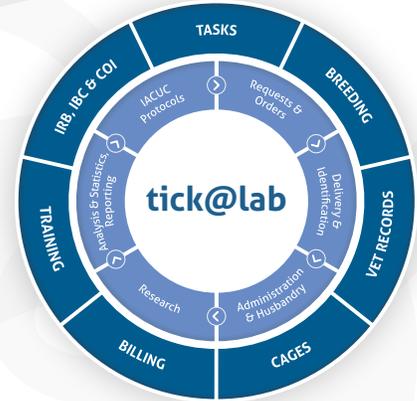
# tick@lab

## What Does tick@lab Do for Me?

*a-tune*  
a Transnetyx Company

### Who does tick@lab help? And how?

tick@lab delivers wide-ranging benefits to individuals and teams across the full spectrum of research. It's intuitive and easy to use, makes managing and presenting data simple, and provides users the freedom to focus on what matters most and what they do best. Say goodbye to siloed systems and niche solutions that impede processes and add extra work. Say hello to a single and secure environment that simplifies data management, streamlines process, ensures compliance, and saves time and money for research-driven organizations.



#### Facility Managers

Improve control and visibility of operations and information

- Get real-time information and answers in one centralized and fully connected platform
- Streamline communication and processes across the entire organization
- Reduce operational risk with stronger controls, configurable components, and full transparency

#### Researchers

Enable focus on what matters most – Research

- Reduce administrative and clerical tasks
- Gain a complete and centralized view into key research-supporting processes and services
- Ensure required data is collected and submitted efficiently, accurately, and reliably

#### Directors

Deliver excellent research support... every time

- Empower your team with the tools they need
- Provide KPIs supporting your Management Decisions
- Mitigate Compliance Risks
- Maximize Cost Recovery with Improved Accuracy

#### Research VPs

Gain a competitive edge and confidence in compliance

- Improve your ability to attract, retain, and support world-class research projects
- Connect people, processes and systems to drive transparency, efficiency, and information access
- Ensure all regulatory and granting agency requirements are fully satisfied

### Research-driven organizations rely on a-tune

**50,000+**

Users Worldwide

**5** OF THE **TOP 7**

Pharmaceuticals

**140+**

Research Institutions

**100+**

World-Renowned Universities

**20+**

Countries