

Maine INBRE

Lead institution:
-MDIBL

Research partners:
-JAX
-UMaine (Orono)
-UNE



PUI partners:

- Bates
- Bowdoin
- Colby
- College of the Atlantic
- UMaine Farmington
- UMaine Honors College
- UMaine Machias
- UMaine Presque Isle
- SMCC

Outreach institution:

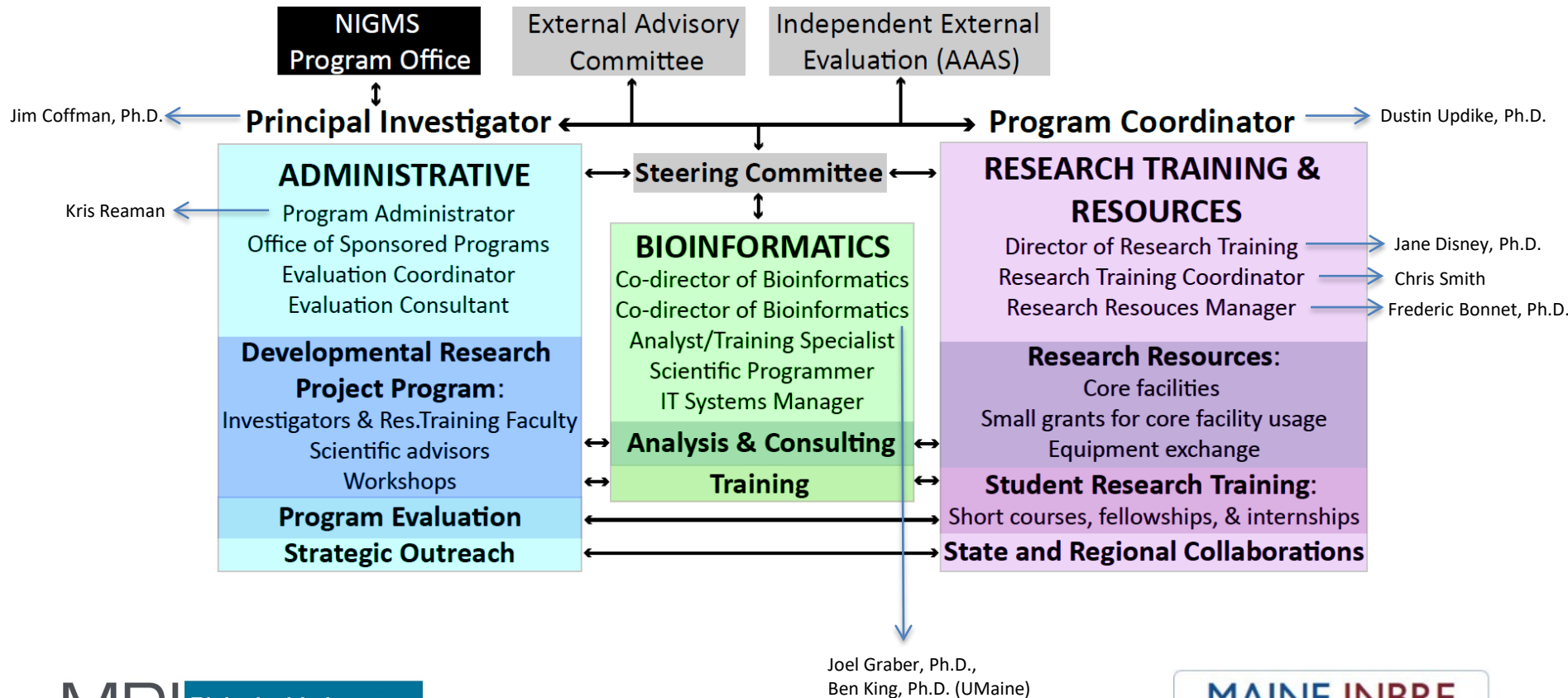
- UMaine Fort Kent

Maine INBRE

Specific Aims

- 1) To increase biomedical research excellence in Maine by way of engaged, responsive leadership and core services that provide resources and implement training programs within an established, highly collaborative statewide network
- 2) To implement new research and training programs that address emerging opportunities and developing needs of ME-INBRE and serve as a pipeline to biomedical research careers in Maine

Maine INBRE Cores and Administrative Organization



Maine INBRE Steering Committee

- 1-2 representatives from each partner institution; one must be a senior administrator
- Includes the faculty member responsible for INBRE programs at each partner institution with a subcontract
- Advises INBRE leadership (PI, PC, Core Directors) on needs at home partner institution, direction of the INBRE
- Meets ~quarterly and as needed

Maine INBRE Steering Committee

Name	Institution	E-mail	Position / Title
Ryan Bavis, Ph.D.	Bates	rbavis@bates.edu	Associate Professor
Áslaug Ásgeirsdóttir, Ph.D.	Bates	aasgeirs@bates.edu	Associate Dean for the Sciences and Social Sciences
Patsy Dickinson, Ph.D.	Bowdoin	pdickins@bowdoin.edu	Professor; Program Director, Neuroscience
Rachel Beane, Ph.D.	Bowdoin	rbeane@bowdoin.edu	Associate Dean for Academic Affairs
Russell Johnson, Ph.D.	Colby	russ.johnson@colby.edu	Provost and Dean of Faculty
Andrea Tilden, Ph.D.	Colby	artilden@colby.edu	Associate Professor of Biology
Chris Petersen, Ph.D.	COA	chrisp@coa.edu	Associate Academic Dean
Helen Hess, PhD	COA	HHESS@coa.edu	Professor of Biology
Charlie Wray, Ph.D.	JAX	Charlie.Wray@jax.org	Director Courses and Conferences
Michael McKernan	JAX	Michael.Mckernan@jax.org	Director STEM and Undergraduate Education
Elizabeth Ehrenfeld, Ph.D.	SMCC	eehrenfeld@smccme.edu	Adjunct Professor of Science
Kody Varahramyan, Ph.D.	UMaine	varahramyan@maine.edu	VP for Research
Clarissa Henry, Ph.D.	UMaine	clarissa.henry@maine.edu	Program Director GSBSE
Stephanie Welcomer, Ph.D.	UMHC	welcomer@maine.edu	Interim Dean, Honors College
Sally Molloy, Ph.D.	UMHC	sally.dixon@maine.edu	Assistant Professor of Genomics
Jean Doty, Ph.D.	UMF	jeandoty@maine.edu	Professor of Biology
Eric Brown, Ph.D.	UMF	brown.eric@maine.edu	Provost & VP Academic Affairs
Karen Houseknecht, Ph.D.	UNE	khouseknecht@une.edu	Associate Provost for Research and Scholarship
William Otto, Ph.D.	UMM	william.otto@maine.edu	Associate Professor of Chemistry
Christin Kastle, Ph.D.	UMFK	christin.kastl@maine.edu	Assistant Prof of Biology
Jason Johnston, Ph.D.	UMPI	jason.johnston@maine.edu	Assist. Prof. of Biology, Fellow in Public Outreach

Maine INBRE External Advisory Committee

- Reviews DRPP applications and projects
- Meets in person annually, by phone or Zoom as needed
- Advises INBRE PI

EAC Member	Expertise
Lucy Liaw, Ph.D. (Chair)	Cellular, molecular, and developmental biology
Steven Fiering, Ph.D.	Microbiology and immunology
Andrea Duina, Ph.D.	Eukaryotic transcription, chromatin
C. Titus Brown, Ph.D.	Bioinformatics and computational biology
Story Landis, Ph.D.	Neurobiology



Maine INBRE Workshops

- Annual:
 - Grant writing (July)
 - Applied Bioinformatics (July)
 - *De novo* transcriptome assembly (MINOTA, October)
- Occasional or in development:
 - Lab Management
 - Microscopy

Maine INBRE Developmental Research Project Program (DRPP)

- 3-year awards, with possibility of competitive renewal of up to two years
- Two types of award:
 - Investigator awards support research projects, require 50% effort commitment of the awardee
 - Research Training Faculty awards support pilot projects at PUI partners, with a focus on engaging undergraduates in cutting-edge research (15-25% committed effort)

Maine INBRE Developmental Research Project Program (DRPP)

- Required activities of project leaders:
 - Apply for funding in response to FOA issued by the INBRE Administrative Core
 - The FOA describes the application process and components
 - Write and submit an individualized development plan (IDP) at beginning of project
 - Identify and engage with 1-2 scientific advisors (mentors)
 - For Investigators one should be external and an expert in the investigator's field of research, the second should be internal, providing advice on career advancement at the home institution

Maine INBRE Developmental Research Project Program (DRPP)

- Required activities, continued
 - Quarterly reports: August (Q1), November (Q2), February (Q3), and May (Q4)
 - Annual Report for EAC : July
 - Include progress on research, IDP
 - Includes comments from scientific advisors/mentors
 - Annual Report for NIH (RPPR): January
 - Attend NISBRE and regional IDeA conferences
 - Apply for independent funding by end of second year of INBRE support

Maine INBRE Developmental Research Project Program (DRPP)

- **Investigators:**

- **Andrew Kennedy** (Bates) - *Epigenetic mechanisms of memory formation and maintenance*
- **Lori Banks** (Bates) - *Sequence requirements of viroporin ion channel activity*
- **Martin Kruse** (Bates) - *Regulation of neuronal excitability by phosphoinositide metabolism*
- **Colleen O’Loughlin** (Bates) - *Identification, elucidation, and characterization of small molecules produced by common skin commensals and their role in microbe: microbe interactions and host health*
- **Larry Feinstein** (UMPI) - *Utilizing temporal and biogeographical comparative functional genomics to inform screening for novel antimicrobial targets*
- **Sally Molloy** (UMaine) - *Investigating the impact of mycobacterial prophage on bacterial fitness and virulence*
- **Suegene Noh** (Colby) - *Identification of genes involved in the crosstalk between a social host and facultative symbionts that can form long-term persistent association*

- **Research Training Faculty:**

- **Tim Breton** (UMF) - *Gonadal expression and comparative genomics of the highly conserved vertebrate G protein-coupled receptor family SREB across evolution of bony fishes*
- **Don Dearborn** (Bates) - *Parasites in Nature: Understanding the functional significance of genetic variation in the vertebrate immune system*
- **Mike Palopoli** (Bowdoin) - *Evolution of gene regulation within and between species of Drosophila*
- **Julie Millard** (Colby) - *Genomic variation in the equilibrative nucleoside transporter ENT1 in relationship to the human absorption of caffeine*

Maine INBRE Opportunities for UNE Faculty and Students

- Eligible for investigator awards (\$90 K dollars/year direct)
 - Competitive with UMaine Orono; FOA to be issued this fall
 - For early career stage faculty
- Workshops/training (grant writing, etc.)
- Small grants for research resources and core facility use (up to \$5k)
- Access to the Bioinformatics Core
- Mentor summer INBRE undergrad fellows
- Travel awards for graduate students (requests up to \$1k/student)

Maine INBRE Expectations of UNE

- Attendance of Steering Committee meetings
- Interact with INBRE core leadership and with other INBRE partner institutions
 - Mentoring of summer undergraduate research fellows from INBRE partner PUIs
- Providing INBRE partners access to UNE research resources (e.g. core facilities)
- Investigator awardees must file quarterly reports, meet other requirements of the DRPP