

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### Academic Year of Graduation: Fall 2017 to Summer 2018

##### Animal & Nutritional Sciences

Author	Dissertation Title
Ghedini, Caren Paludo	Improving the Understanding of Different Diets on the Concentration and Metabolism of the Mammalian Lignan Enterolactone in Dairy Cattle

##### Biochemistry

Author	Dissertation Title
Hausken, Krist Norman	Structure-Function Studies of the Lamprey Pituitary Glycoprotein Hormone (GPH), Thyrostimulin, and the Expression and Activation of Glycoprotein Hormone Receptors I and II by Recombinant Lamprey GPH and Thyrostimulin
Yang, Danlin	IGG Coopeartivity- Is There Allostery? Intra- and Inter-Molecular Cooperativity in IgG Antibodies

##### Biological Sci: Agricultural

Author	Dissertation Title
Aragona, Kayla Marie	Effects of Nicotinic Acid and B-Carotene Supplementation Prepartum on Cows, Colostrum and Calves, and Effects of B-Carotene Supplementation to Lactating Holstein Cows

##### Chem:Chemistry Education

Author	Dissertation Title
Buell, Rene Whitney	Investigations of the Effects of Reading Skill and Epistemological Beliefs on Learning in General Chemistry, and Development of a Textbook use Survey

##### Chemical Engineering

Author	Dissertation Title
Drufva, Erin Elizabeth	Development of Protein Display Systems and Genetic Tools for Spore-Forming Bacteria
Mohammadiarani, Hossein	Simulation Studies of Signaling and Regulatory Proteins
Yang, Guangxing	Mechanistic Studies of the Complete Electrochemical Oxidation of Ethanol into CO <sub>2</sub> over Platinum-Based Core-Shell Nanocatalysts
Zukas, Brian G	Synthesis of Metal Oxide Nanoparticles and Mesocrystals in an Interphase Droplet Reactor

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### Chemistry

Author	Dissertation Title
Abdalahman, Mahmoud Ali	Bifunctional Ligands for Ratiometric Sensing of Cu(II) and Nuclear Imaging with <sup>89</sup> Zr: Design, Synthesis, Characterization and Aqueous Speciation
Dinneen, Sean Ryan	Optical Properties of the Pigments from Cephalopod Chromatophores: Solution and Particle Determination
Henry, Jessica Shay	HILIC-MS/MS Method Development for the Analysis of Select Paralytic Shellfish Toxins in Shellfish Harvested from New Hampshire Coastal Waters
Song, Min	Synthetic Applications of Cationic Rearrangements and Cyclizations
Tooley, Christian Alexander	A Completely Synthetic Approach to Modeling [FeFe] Hydrogenase: Single-Chain Nanoparticles Functionalized with Diiron Clusters

#### Civil Engineering

Author	Dissertation Title
Anajafimarzizarani, Hamidreza	Improved Seismic Design of Non-Structural Components (NSCs) and Development of Innovative Control Approaches to Enhance the Seismic Performance of Buildings and NSCs
Mirshekari, Morteza	Seismic Site Response of Partially Saturated Soil Layers
Oshone, Mirkat Tamire	Performance Based Evaluation of Cracking in Asphalt Concrete Using Viscoelastic and Fracture Properties
Yari, Nasser	New Model for Bridge Management System (BMS): Bridge Repair Priority Ranking System (BRPRS), Case Based Reasoning for Bridge Deterioration, Cost Optimization, and Preservation
Zhang, Rui	Smart Buildings: An Integrative Double Skin Facade Damper System for Safety and Energy Efficiency

#### Earth&Environmental Sci

Author	Dissertation Title
Brereton, Richard L.	Nitrogen Dynamics and Retention in the River Network of a Tropical Forest, Luquillo Mountains, Puerto Rico
Carroll, Abigail Rachel	Ecosystems, Communities, and Species: Understanding Mammalian Response to Ancient Carbon Cycle Perturbations
Cassotto, Ryan	Unraveling Short-Term Variations in Tidewater Glacier Flow: Insights from Terrestrial Radar Interferometric Studies

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Koenig, Lauren Elizabeth	Hydrological and Biogeochemical Controls on Carbon and Nitrogen Export from River Networks
Morrison, Eric Ward	Fungi as Drivers of Ecosystem Response to Global Change

#### Education

Author	Dissertation Title
Benna, Justin V	Superintendent Trustworthiness: An Interpretive Qualitative Study of New Hampshire Public Elementary School Principals' Experiences and Perceptions
Evans, Carla M	Can Schools be Reformed by Reforming Assessment?: The Effects of an Innovative Assessment and Accountability System on Student Achievement Outcomes
Hicks, Matthew S	An Exploratory Mixed-Methods Study of Followership Types in New Hampshire High Schools
Hildebrandt, Michael James	The Activity of Becoming a Second-Career Teacher
Karkour, Islam Rashad Mohamed	World Languages Coursework and Intercultural Sensitivity in American Higher Education
Stearns, Clio	Affect in the Classroom: A Psychoanalytic and Cultural Exploration of Social and Emotional Learning

#### Education:Child & Youth Comm

Author	Dissertation Title
Baril, Erika Molly	Perceptions of Caregiver Coaching and Factors that Influence Implementation: A Mixed Methods Case Study of New Hampshire's Part C Early Intervention

#### Engineering:Systems Design

Author	Dissertation Title
Valcourt, Scott Anthony	The Identification of Major Factors in the Deployment of a Science DMZ at Small Institutions

#### English

Author	Dissertation Title
Cheney, Matthew Alan	Lessoning Fiction: Modernist Crisis and the Pedagogy of Form
Cogbill, Adam Parker	Working Alliances: The Implications of Person-Centered Theory for Student-Teacher Relationships and Learning



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
VanDellon, Wendy J.	Revisiting the Personal Essay: Examining the Neglected Sophistication and the Rhetorical Dexterity of Student Writing

#### History

Author	Dissertation Title
Nelson, Derek Lee	Shipworms and the Making of the American Coastline
Oliva, Justine Elizabeth	The Circles of Anne C. Lynch Botta: Friendship and Power in the Nineteenth Century

#### Mathematics Education

Author	Dissertation Title
Wallinga, Willem J	Examining the Benefits of Instructional Assessment as Experienced by Secondary Mathematics Teachers

#### Mechanical Engineering

Author	Dissertation Title
Ardeljan, Milan	Size-Sensitive Crystal Plasticity Finite Element Framework for Stimulating Behavior of Lamellar Metal-Metal Composites
Zhou, Ang	Self-Similar Properties and Leading Balance Scaling Structure of Wall-Bounded Turbulent Flows

#### Nat Resrces & Envirn Stdy

Author	Dissertation Title
Affleck, Rosa T	Infrastructure Impact for Human Safety and Resilience: A Case Study
McIntire, Cameron Ducayet	Impacts and Management of Foliar Pathogenes on Eastern White Pine in the Northeastern United States
Ouimette, Andrew P	Patterns and Drivers of Carbon Fluxes in Temperate Forests

#### Ocean Engineering

Author	Dissertation Title
Wengrove, Meagan Elizabeth	Bedform Geometry and Bedload Sediment Flux in Coastal Wave, Current, and Combined Wave-Current Flows

#### Physics

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Alresheedi, Faisal Ibrahim	Structure and Mechanical and Tribological Properties of Magnetron Sputter Deposition of Stainless-Steel Nitride and Carbide Thin Films with Transition Metal Additives
Badman, Tobias	The Proton Spin Structure Function GP2 at Low Momentum Transfer
Dai, Zhongwei	Atomic Structure Studies of 2D Materials and Advancement of Dynamical LEEM / uLEED-IV Analysis
Fritz, Bruce Aaron	Fine Structure in the Ionosphere
Grady, Maxwell Charles	A Study of the Surface Structure of Polymorphic Graphene and other Two-Dimensional Materials for use in Novel Electronics and Organic Photovoltaics
Li, Gen	Interplanetary Transport of Solar Energetic Particles

#### Psychology

Author	Dissertation Title
Blandina, Alexander	Can You Hear Me Now? The Moderating Effects of Procedural Justice Within Consumer-Brand Relationships
Demers, Jennifer Maria	Virtually Stepping in: Bystanders' Responses to Sexual Assault-Related Post on Facebook
Rodenhizer, Kara Anne Eleanor	Mind Over Media? Assessing Indicators of Relationship Media Literacy as Moderators of Sexual and Violent Media Exposure and Dating and Sexual Violence Outcomes Among High School Youth
Stafford, Nathaniel P	Ultrasonic Vocalizations and Stress Resilience: Behavioral and Neurobiological Correlates

#### Sociology

Author	Dissertation Title
Mitiguy, Angela M	Understanding College Men's and Women's Perception of Sexual Behavior Responsibility through the Lens of the Human Papillomavirus
Wiesen-Martin, Desiree Ruth	Nature of Formal Intimate Partner Violence Help Seeking: The Influence of Individual and Community Characteristics

### Academic Year of Graduation: Fall 2016 to Summer 2017

#### Animal & Nutritional Sciences

Author	Dissertation Title
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## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Whitehouse, Nancy Lee	Using the Plasma Free Amino Acid Dose Response Method to Determine Metabolizable Protein Concentrations of Lysine and Methionine in Rumen Protected Supplements

#### Biochemistry

Author	Dissertation Title
Gao, Xiongzhao	Regulation of Photoreceptor Phosphodiesterase and its Activation by Transducin Elucidated by Structural and Biochemical Approaches
Park, Shiwha J	Characterization and Identification of Protein Components and Interactions in Translation Repression, Translation Initiation and Protein Aggregate Formation

#### Chemical Engineering

Author	Dissertation Title
Deng, Ye	Development of Novel Bio- And Heterogeneous Catalysts for the Production of Bio- and Green Diesel
Lu, Jing	Adsorption of Benzyl Viologen and Polyethylene Glycol and Their Displacement by 3-Mercapto-1-Propanesulfonate During Copper Electrodeposition

#### Chemistry

Author	Dissertation Title
Chhetri, Rekha Kumari	I. Synthesis of Hydroxy Cyclopropyl Peptide Isosteres Using Zinc-Mediated Chain Extension Cyclopropanation Reaction II. Synthesis and Stereochemical Studies of Phenylalanine-Derived Bicyclic Lactones
Cole, Justin Patrick	Bio-Inspired Synthetic Systems
Grenier, Casey J	Rapid, High Affinity Binding by Molecularly Imprinted Poly (N-isopropylacrylamide) Copolymers with Mostly Non-Covalent Crosslinks for Chemical Sensing and Separation Applications
Guevara, Holly Michelle	Insights into the Ring-Opening Mechanism of Benzene Metabolism; an Investigation of the Oxidation of Model Oxepins by Cytochrome P450
Hanlon, Ashley Marie	Design and Synthesis of Polymeric Nanostructures Using Single-Chair Technology and Controlled Architectures
Louis, Michael Eric	Derivatization of Diimine Tricarbonyl Re(I) Complexes for Cooperative Catalysis and Surface Immobilization

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Nyiranshuti, Lea	Design, Synthesis and Characterization of Bifunctional Ligands and Fluorescent Sensors for Bioavailable Cu(II), Zn(II) and Fe (III)
Rodriguez, Kyle Joel	Modeling Secondary Coordination Sphere Interactions in Heme Proteins: From Small Molecule Ligands to Macromolecular Porphyrin-Cored Polymer Nanoparticles

#### Civil Engineering

Author	Dissertation Title
Elshaer, Mohamed Hamdallah	Assessing the Mechanical Response of Pavements During and After Flooding
Hauer, Whitney Blanchard	Warm Water Entertainment Impacts and Environmental Life Cycle Assessment of a Proposed Ocean Thermal Energy Conversion Pilot Plant Offshore Oahu, Hawaii
Jarast-Shamsabadi, Pegah	Numerical and Physical Modeling of Cone Penetration in Unsaturated Soils and Numerical Simulation of Fracture Propagation in Shale Rock During Brazilian Test
Rahbar Rastegar, Reyhaneh	Cracking In Asphalt Pavements: Impact of Component Properties and Aging on Fatigue and Thermal Cracking
Vuyovich, Carrie M.	Passive Microwave Satellite Snow Observations for Hydrologic Applications

#### Computer Science

Author	Dissertation Title
Fekete, Andras K	Raidx:Raid Extended For Heterogeneous Arrays
Fekete, Andras K	RAIDX: Raid Extended for Heterogeneous Arrays

#### Earth&Environmental Sci

Author	Dissertation Title
Atwood, Lesley Wren	Effects of Agricultural Practices on Soil Communities and their Associated Ecosystem Services
Aviado, Kimberly Bahia	Magma Genesis Beneath Active Continental Rifts

#### Economics

Author	Dissertation Title
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### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Brewer, Ben S	The Growth Effects and Unintended Consequences of State and Federal Policies
Shi, Wei	Non-Market Valuation Methods: Evaluation and Applications

#### Education

Author	Dissertation Title
Arakelian, Caroline Patricia	Understanding Transition Planning and Postsecondary Outcomes for Young Adults with Disabilities Across National, State, and School Levels
Clarke-Vivier, Sara Ann	Designing a Curriculum for Difficult History: Teachers, Museum Workers, and War Photojournalism
Moore-Vissing, Quixada Lea	The Supper Effect: Community Engagement as a Path to School and Community Change in a Small Rural Town
Sanchez-Rothkegel, Vilmarie	Facilitating Preservice Teachers' Examination of Beliefs About Language and Linguistic Diversity
Scarpati, Jennifer C	Are 21st Century After School Programs an Effective Academic Intervention for Elementary School Students Attending High Poverty Schools?

#### Electrical&Comp Engineering

Author	Dissertation Title
Al Badrawi, Mahdi Hameed Mahdi	Statistical Properties and Applications of Empirical Mode Decomposition

#### English

Author	Dissertation Title
Dittrich, Bradfield Edward	Edward Channing's Writing Revolution: Composition Prehistory at Harvard, 1819-1851
You, Xiaoqiong	Mapping Academic Literacy Networks: Multilingual International Students Writing in a Business School

#### Genetics

Author	Dissertation Title
Kordonowy, Lauren Lindsay	Genomic Evaluation of Male Reproductive Adaptations and Responses to Dehydration in <i>Peromyscus eremicus</i> (Cactus Mouse)
Oshone, Rediet Tamire	Molecular Mechanisms of Salt and Osmotic Stress Tolerance in <i>Frankia</i> Strains Isolated from <i>Casuarina</i> Trees



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Author	Dissertation Title
Thompson, Megan M	Protein Phosphatase 2A Function in Response to Salt Stress in <i>Arabidopsis thaliana</i> : Defining Pathways and Genetic Interaction Networks
Xu, Feng	Dynamics and Interactions of Emergent and Invasive Pathogenic Lineages of <i>Vibrio Parahaemolyticus</i> in the Northeastern U.S.

#### History

Author	Dissertation Title
Demmer, Amanda Catherine	The Last Chapter of the Vietnam War: Normalization, Nongovernmental Actors and the Politics of Human Rights, 1975-1995
Lacroix, Patrick	John F. Kennedy and the Politics of Faith, 1960-1963
Weinman, Kevin	Invisible Suburbs: Privatized Growth in Suburban Metropolitan Denver, 1950-2000

#### Materials Science & Engr

Author	Dissertation Title
Zhang, Pei	Exploration of Factors Influencing Polymerization Induced Phase Separation in Seeded Emulsion Polymerization

#### Math Applied

Author	Dissertation Title
Brand, Evan Wells	Spatially-Localized Solutions of Plane Couette Flow
Storch, Laura	Chaos in Ecology: An Examination of Nonlinear Population Dynamics in Diffusive and Advective Dispersal Environments
Szeto, Mimi	A Dynamical-Systems Approach to Understanding Turbulence in Plane Couette Flow

#### Mathematics

Author	Dissertation Title
Bontea, Costel-Gabriel	Brauer-Picard Groups and Pointed Braided Tensor Categories
Marshall, Ian Swenson	On Tensor Autoequivalences of Graded Fusion Categories



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Sager, Lauren Beth Meitzler	A Beurling Theorem for Noncommutative Hardy Spaces Associated with a Semifinite von Neumann Algebra with Various Norms

#### Mathematics Education

Author	Dissertation Title
Bornstein, Neil	Music of the Triangles: How Students Come to Understand Trigonometric Identities and Transformations
Demeke, Eyob Sebsibe	Cognition in Advanced Mathematics: An Exploratory Study Focused on the comprehension and Roles of Proofs
Earls, David J	Students' Misconceptions of Sequences and Series in Second Semester Calculus

#### Mechanical Engineering

Author	Dissertation Title
Dewhurst, Tobias	Dynamics of a Submersible Mussel Raft
Ebadi, Alireza	Transport of Heat and Momentum in Non-Equilibrium Wall-Bounded Flows

#### Microbiology

Author	Dissertation Title
Taylor, Michael Anthony	Microbial Community and <i>Vibrio parahaemolyticus</i> Population Dynamics in Relayed Oysters
Taylor, Michael Anthony	Microbial Community And <i>Vibrio Parahaemolyticus</i> Population Dynamics in Relayed Oysters

#### Nat Resrces & Envirn Stdy

Author	Dissertation Title
Tarr, Matthew David	Effects of Alien Shrubs on Caterpillars and Shrubland-Dependent Passerines within Three Transmission Line Rights-Of-Way in Southeastern New Hampshire
Wilhelm, Jennifer A	Exploring the Socio-Ecological Dimensions of Agricultural Expansion in New Hampshire

#### Ocean Engineering

Author	Dissertation Title
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## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Ramos Freire, Ricardo	Evaluating Satellite Derived Bathymetry in Regard to Total Propagated Uncertainty, Multi-Temporal Change Detection, and Multiple Non-Linear Estimation

#### Physics

Author	Dissertation Title
Chen, Junhong	Modeling and Observation of He <sup>+</sup> Pickup Ions in the Inner Heliosphere
Ferdousi Shahandashti, Banafshe	The Study of Magnetotail Dynamics and Their Ionospheric Signatures Using Magnetohydrodynamic Simulation Model: OpenGGCM
Ferradas Alva, Cristian Pablo	Understandin Ion Spectral Dynamics Near the Inner Edge of the Plasma Sheet
Joyce, Colin James	Characterization of the Radiation Environment of the Inner Heliosphere Using LRO/CRaTER and EMMREM
Muzamil, Fathima Muzleena	A Study of Reconnection Poleward of Cusp: Cluster
Phillips, Ryan Sean	Biophysical Mechanisms Of Rhythm Generation In The Pre-Botzinger Complex
Yu, Wenyan	Small Solar Wind Transients 1995-2014: Properties, Modeling, and Effects on the Magnetosphere
Zielinski, Ryan Bruce	The gp2 Experiment: A Measurement Of The Proton's Spin Structure Functions

#### Psychology

Author	Dissertation Title
Allen, Jayne L	Personal Intelligence and Learning About Personality in Everyday Life

#### Sociology

Author	Dissertation Title
Schaefer, Andrew Paul	Religious Affiliation an Women's Labor Patterns in U.S. Counties
Speropolous, Lisa I	Full Steam Ahead: The Effects of a STEAM-Focused Education on High School Students' Academic Performance, Engagement in School, and Perceptions of College and Career Readiness

**Academic Year of Graduation: Fall 2015 to Summer 2016**

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### Animal & Nutritional Sciences

Author	Dissertation Title
De Barros Duarte Pereira, Andre	Energy and Protein Efficiency of Lactating Dairy Cows Fed Ground Peas, Canola Meal and Rumen-Protected Amino Acids

#### Biochemistry

Author	Dissertation Title
Xi, Wen	The Application of Analytical Ultracentrifugation with Fluorescence Detection System to the Study of Macromolecular Complexes in Biological Systems

#### Biological Sci: Agricultural

Author	Dissertation Title
Chapman, Colleen Elizabeth	Improving Nutrient Utilization and Growth in Dairy Heifers

#### Chemical Engineering

Author	Dissertation Title
Hemmati, Shohreh	Synthesis and Characterization of Silver Nanowire Suspensions for Printable Conductive Media

#### Chemistry

Author	Dissertation Title
Alomari, Moh'd I	A Model Study of Adlayer Pattern Formation of Rigid Di-Tri- and Tetratopic Molecules on Square and Triangular Lattices
Frank, Peter George	The Application of Anthracene Towards the Synthesis and Manipulation of Single-Chain Polymer Nanoparticles
Geng, Hao	Syntheses of Starphenes and [60] Fullerene-Starphene Adducts
Jin, Tong	Coupling Molecular Catalysts with Nanostructured Surfaces for Efficient Solar Fuel Production
Lyon, Christopher K	Single Chain TechnologyL Toward the Controlled Synthesis of Polymer Nanostructures
Prasher, Alka	Palladium (0) and Copper (I) Catalyzed Cross-Coupling Reactions: A Facile Route for the Synthesis of Polymer Nanoparticles
Zhao, Jianyu	Linearly Extended Pyrylium Salts (LEPS) and Linearly Extended Thiopyrylium Salts (LETS) as Organic Semiconductors

#### Computer Science



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Kiesel, Scott	Robotics Needs Non-Classical Planning
Liu, Qian	Adaptive Congestion Control Mechanisms in InfiniBand Networks

#### Earth&Environmental Sci

Author	Dissertation Title
Grogan, Danielle S	Global and Regional Assessments of Unsustainable Groundwater Use in Irrigated Agriculture

#### Economics

Author	Dissertation Title
Furnagiev, Steven Kris	Fundamentals and Risk in Currency Markets: The Role of Microstructure Principles and Parameter Instability
Hurdelbrink, Jonathan Robert	Essays in the Economics of Long-Term Care Utilization

#### Education

Author	Dissertation Title
Kurtz, Alan J	A Mixed Methods Study of the Effects of Family-Centered Transition Planning on the Quality of Transition Individualized Education Plans of Youth with Autism Spectrum Disorders
McCurdy, Kathryn J	Supporting Early Career Teacher Learning: Investigation into Induction Supports and Early Career Teacher Professional Learning in New Hampshire
Robison, Christina M	Players, Consumers and Creators: Literacy Orientations Among Adolescents Attending a Small, Rural School
Stemmermann, Joann	Strategic Gendering: The Negotiated Social Actions of Adolescent Girls

#### Electrical&Comp Engineering

Author	Dissertation Title
Pahlevanzadeh, Hoda	Assessing and Improving the Reliability and Security of Circuits Affected by Natural and Intentional Faults

#### Engineering:Mat Science

Author	Dissertation Title
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## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Hu, Shunfu	Novel Applications of Functionalized Carbon Nanotubes and Fullerenes

#### English

Author	Dissertation Title
Franco, Sarah Beth	Liberation Through Listening: Learning from Student Veterans in Composition Classrooms

#### Genetics

Author	Dissertation Title
Shields, Melanie E	Genomic Resource Development and CAndidate Gene Evaluation in <i>Fragaria vesca</i> (L.)

#### History

Author	Dissertation Title
Melia, Timothy Francis	The Swift Water Place: WAter Quality, Fish Ecology, and Hydropower in the Merrimack River Since the Time of Thoreau
Verney, Michael A	"A Great and Rising Nation": American Naval Exploratio nand the Forging of a Global Maritime Empire, 1815-1860

#### Materials Science & Engr

Author	Dissertation Title
Tuten, Bryan T	Modular and Dynamic Approaches to the Formation of Single-Chain Polymer Nanoparticles

#### Mathematics

Author	Dissertation Title
Benson, David F	Extension of MF Algebras and Volume Entropy in Finite Von Neumann Algebras

#### Mathematics Education

Author	Dissertation Title
Machmer-Wessels, Keely	Discussion, Task Selection, and NOvice Mathematics Teachers' Understanding of the Common Core Math Practices

#### Mechanical Engineering



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Bachant, Peter	Physical and Numerical Modeling of Cross-Flow Turbines

#### Microbiology

Author	Dissertation Title
Dillon, Marcus M	The Rate, Spectrum and Effects of Spontaneous Mutation in Bacteria with Multiple Chromosomes

#### Nat Resrces & Envirn Stdy

Author	Dissertation Title
Eaysr, Stephen J	Organizational Change Management in Fisheries: Critical Evaluation and Potential to Facilitate the Sustainable Development of the New England Groundfish Industry
Feeney, Rachel G	Catch Share Management in the Northeast Multispecies Fishery: Implications for the Commercial Groundfish Fishery in New Hampshire
Houle, James J	Community Decisions About Innovations in Water Resource Management and Protection
Kessler, Neil H	Ontology of Close Human-Nature Relationships
Smith, Matthew M	Creating an Economically Viable, Closed-System, Energy-Independent Dairy Farm Through the On-Farm Production of Animal Bedding and Heat Capture from an Aerated Static Pile Heat Recovery Composting Operation

#### Nursing

Author	Dissertation Title
Kallmerten, Pamela S	Patient Portal Use in a Community Medical Group: A Healthcare Improvement Project

#### Oceanography

Author	Dissertation Title
Schwehr, Monica W	The Relationship Between Oceanic Transform Fault Segmentation, Seismicity, and Thermal Structure

#### Physics

Author	Dissertation Title
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## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Ahmadihojatabad, Narges	Nonlinear Evolution of Mirror Instability in the Earth's Magnetosheath in PIC Simulations
Aliotta, Paul V	Mechanisms for ORientation in Low Energy Ion Beam Assisted TiA1N Thin Film Growth
Boyd, Alexander Justin	Quantifying the Role of the Seed Population in Radiation Belt Dynamics
Leonard, Trevor W	Analyzing the Interstellar Neutral He Bulk Flow Parameters With IBEX-Lo
Park, Jeewoo	Investigating the Interstellar and Heliospheric Heavy Neutral Atoms with IBEX-Lo
Shuster, Jason R.	"Smoking-Gun" Observables of Magnetic Reconnection: Spatiotemporal Evolution of Electron Characteristics Throughout the Diffusion Region

#### Plant Biology

Author	Dissertation Title
Wallhead, Matthew W	IPM2.0: Precision Agriculture for Small-Scale Crop Production
Yang, Yilong	Investigation of Subgenome Composition in Octoploid Strawberries

#### Psychology

Author	Dissertation Title
Barlow, Bonnie A	What is Self-Potential and How Does it Relate to Personal Intelligence?
Biondolillo, Mathew	Using Your Mind to Train Your Body: An Experimental Autobiographical Memory Intervention for Adolescent Physical Activity
Dixon, Kristiana J	The Effect of Family Violence on Peer and Partner Violence Patterns: An Examination of Self-Concept as a Mediating Mechanism
Karaivanova, Katerina Dimitrova	The Effects of Encouraging Student-Faculty Interaction on Academic Success, Identity Development, and Student Retention in the Frist Year of College
Melville, Michael C	The Role of Social Agency in Student Learning
Miller, Rikki L A	Cellular Coding Properties of Goal Directed Behavior in the Mediodorsal and Intralaminar Nucleus of the Rat: Comparisons to Prefrontal Cortex



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Phillips, Kimberly G	Navigating Barriers at Work: Exploring the Perceptions of Employees with Disabilities
Rasco, Danney D	Evaluating the Structure of Subjective Well-Being in Casual Models: Are Three Constructs Better Than One?
Sylaska, Kateryna M	Major Decisions: Personal Intelligence and Students' Reasoning About College Majors
Turner, Sidney Alexandra	Reasons for Revealing and Concealing Interpersonal Trauma
Walsh, Erinn K	Overcoming Violations of Real-World Knowledge in a Fantasy-World Text

#### Sociology

Author	Dissertation Title
Henly, Megan M	Well-Being as a Measure of Inequality Among the Retirement-Age Population: An Examination of the Role of Place, Migration, and Socioeconomic Status in Shaping Happy and Healthy Older Americans
Shattuck, Anne M	A Woman's Work is Never Done? Earlier Life Child, Marital, and Work History and Older Women's Relationship to the Paid Labor Force

#### Statistics

Author	Dissertation Title
Pan, Yibin	Uncertainty Quantification in Downscaling of Precipitation Extremes and its Application to New England
Ziniti, Beth Louise	Computationally Efficient Specifications of Spatial Point Process Models and Spatio-Temporal Gaussian Models: Combining Remote Sensing Drivers with Geospatial Disease Case Data to Enhance Geographic Epidemiology

#### Zoology

Author	Dissertation Title
Edmundson, Shelley Ann	Channeled Whelk ( <i>Busycotypus canaliculatus</i> ) Ecology in Relation to the Fishery in Vineyard and Nantucket Sounds, Massachusetts

### Academic Year of Graduation: Fall 2014 to Summer 2015

#### Biochemistry

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Her, Cheng	Survey of the Charge Properties of Phospholipids Using Nanodiscs and Membrane-Confined Electrophoresis

#### Chemical Engineering

Author	Dissertation Title
Carroll, Robert M	Computational Study of Droplet and Capsule Flow in Channels with Internal Effects

#### Chemistry

Author	Dissertation Title
Bhogadhi, Yashoda Naga Deepthi	Formal Synthesis of CJ-12,954 and CJ-13,014 using Zinc-Mediated Tandem Chain Extension-Aldol Reaction and Synthesis and Investigation of Diastereoselectivity of Hydroxy-Cyclopropyl Peptide Isosteres
Guo, Qing	Development of an Isotopic Approach for Detailing Heparin Sequences
Joiner, Sarah L	Rearrangements, Cyclizations, and Coupling Reactions of Polycyclic Aromatic Hydrocarbons
Liu, Chao	Photochemical and Electrochemical CO <sub>2</sub> Reduction Using Hybrid Catalysts

#### Civil Engineering

Author	Dissertation Title
Mensching, David J	Developing Index Parameters for Cracking in Asphalt Pavements Through Black Space and Viscoelastic Continuum Damage Principles
Negrete-Padilla, Miguel	Numerical Updating on Collapse Simulation of Multi-Story Buildings Through Hybrid Testing

#### Computer Science

Author	Dissertation Title
Li, Ying	Intermittently Connected Delay-Tolerant Wireless Sensor Networks

#### Earth&Environmental Sci

Author	Dissertation Title
Clausen, Jay L	Sampling of Soils with Metallic Residues Collected from Military Small-Arms Ranges

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Fisk, Justin P	Net Effects of Disturbance: Spatial, Temporal, and Societal Dimensions of Forest Disturbance and Recovery on Terrestrial Carbon Balance
Honsberger, Ian W	Metamorphism, Deformation, Geochemistry, and Tectonics of Exhumed Ultramafic and Mafic Rocks in the Central and North-Central Vermont Appalachians
Kallenbach, Cynthia M	Microbial Influences on Decomposition and Soil Organic Matter Formation in Agricultural Soils
Morse, Nathaniel B	Quantifying the Impact of Urbanization on N and P Inputs, Transformations, Removal and Fluxes in Watersheds Draining to the Plum Island Estuary
Rogers, Jeffrey N	Full-Waveform and Discrete-Return Lidar in Salt Marsh Environments: An Assessment of Biophysical Parameters, Vertical Uncertainty, and Nonparametric Dem Correction

#### Economics

Author	Dissertation Title
Gao, Jia	Three Essays in the Economics of Child Health and Development
Kurtz, Michael D	Education Production: Teacher Evaluation Models and Weekend Feeding Programs
Sun, Yunjin	Three Essays in Behavioral Finance: The Influence of Intelligence, Gender, and Sentiment

#### Education

Author	Dissertation Title
Cook, John B	Doing the Tough Work: Care and the Dynamics of Community-University Engagement
Schwartz, Michael F	Competencies for the 21st Century: Teaching an Understanding of Others, Critical Thinking, Leadership and a sense of Obligation. Perceptions of Educational Leaders.

#### Engineering:Mat Science

Author	Dissertation Title
Li, Yushu	Syntheses and Characterizations of Novel Organic Semiconductors

#### English

Author	Dissertation Title
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## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Dietrich, Lucas A	Across the Color Line: Race, Reception, and the U.S. Literary Marketplace, 1877-1920
Wecker, Erin C	Mind the Gap: Rhetorical Bridging and Academic Literacy Among Transitional Students
Wight, Shauna S	"Upward Bound is College Bound": Pre-College Outreach Programs' Sponsorship of Academic Writing
Wilde, Patricia A	By Her Available Means: The Sensational Rhetoric of Women's Civil War Memoirs

#### Genetics

Author	Dissertation Title
Akilu, Behailu B	Genetic and Evolutionary Analysis of Plant Replication Protein A 1 (RPA1)

#### History

Author	Dissertation Title
Fansler, Jordan A P	A Serious and Jealous Eye: Federal Union in New England, 1775-1821
Gallaher Boddy, Molly B	Beyond Boston: Catholicism in the Northern New England Borderlands in the Nineteenth Century
Peone, Tricia R	Strange Shall be the Wonders: Preternature in the Early Modern English Atlantic World

#### Materials Science & Engr

Author	Dissertation Title
Tripathi, Amit Kumar	Towards the Understanding of the Effect of Functional Monomers on Latex Particle Morphology Formed by Emulsion Polymerization

#### Math Applied

Author	Dissertation Title
McClain, John F	A Supercell, Bloch Wave Method for Calculating Low-Energy Electron Reflectivity with Applications to Free-Standing Graphene and Molybdenum Disulfide
Wen, Baole	Porous Medium Convection at Large Rayleigh Number: Studies of Coherent Structure, Transport, and Reduced Dynamics

#### Mathematics

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Qian, Wenhua	Type II1 von Neumann Algebras with Property T
Wang, Dong	Strong Kadison-Singer Algebras
Zhang, Ye	Nonseparable Calkin Algebras

#### Mathematics Education

Author	Dissertation Title
Chaar, May	Secondary Preservice, in-Service, and Student Teachers' Noticing of Mathematical Work and Thinking in Trigonometry

#### Mechanical Engineering

Author	Dissertation Title
Arredondo, Robert	Nonlinear Waves on a String with Inhomogeneous Properties
Ebner, Rachel L	Influences of Roughness on the Inertial Mechanism of Turbulent Boundary-Layer Scale Separation
Eren, Firat	Pose Detection and Control of Unmanned Underwater Vehicles (UUVs) Utilizing an Optical Detector Array
Nassiri, Ali	Investigation of Wavy Interfacial Morphology in Magnetic Pulsed Welding: Mathematical Modeling, Numerical Simulations and Experimental Tests
Nedyalkov, Ivaylo P	Performance and Cavitation Characteristics of Bi-Directional Hydrofoils
Nouri Aghjeh Kandi, Mehdi	Real-Time Process Monitoring and Control in Milling
Shaw, Surupa	A Distributed Vortex in Stratified Flow
Zhang, Zhexuan	The Stability and Nonlinear Dynamics of Spatially- Extended Langmuir Circulation

#### Microbiology

Author	Dissertation Title
Flynn, Kenneth M	Causes and Consequences of Diversity Within Experimental Biofilms of <i>Pseudomonas aeruginosa</i>

#### Nat Resrces & Envirn Stdy

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Cox, Dorn A	A Physiocratic Systems Framework for Open Source Agricultural Research and Development
Levine, Dovev	Beyond Campus Borders: How External Environments Impact College and University-Based Renewable Energy Activity
Orefice, Joseph N	Silvopasture in the Northeastern United States
Veysey Powell, Jessica S	Conserving Wetlands for Humans and Amphibians: A Multidisciplinary Approach to Understanding the Social and Ecological Effectiveness of New England's Wetland Policies
Walsh-Emond, Jennifer L	Hybrid Zone Dynamics Between Saltmarsh ( <i>Ammodramus caudacutus</i> ) and Nelson's ( <i>Ammodramus nelson</i> ) Sparrows

#### Nursing

Author	Dissertation Title
Evans, Elizabeth J	Knowledge-Based Medication Administration: Program Evaluation and Optimization
Gagne, Cheryl A	Mitigating the Risk of Unplanned Transfers to Intensive Care
Gray, Megan E	Evaluation of a New Dedicated Education Unit: Influence on Practice and Education
Puccilli, Patricia A	The Risk Factors of Postpartum Hemorrhage

#### Oceanography

Author	Dissertation Title
Phillips, Stephen C	Unraveling Depositional and Diagenetic Signals in Magnetic Susceptibility in Methane-Bearing Sediments along the Indian, Cascadia, and Japanese Margins

#### Physics

Author	Dissertation Title
Abbott, Stephen R	Diamagnetic Stabilization of Double-Tearing Modes in MHD Simulations
Argall, Matthew R	Estimating Proximity to the Asymmetric Reconnection X-Line
Cohen, Ian J	The Study of Ionospheric Response to Precipitation Using Sounding Rocket Observations
DeOliveira, Denny Mauricio	A Study of Interplanetary Shock Geoeffectiveness Controlled by Impact Angles Using Simulations and Observations



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Julien, Manuel G	Development of a FAsT Compton TELescope (FACTEL)
Kavosi, Shiva	Kelvin-Helmholtz Instability at Earth's magnetopause: THEMIS Observations and OpenGGCM Simulations
Larson, Amanda M	The Directed Molecular Self-Assembly of a Novel Pentacene Derivative on Gold Surfaces: An Experimental and Computational Study
Li, Guanlai	Distinct Types of Electron Distribution Functions in Magnetotail Reconnection: Implications for Particle Energization
Madden, Amanda C	Enhanced Analysis Techniques for an Imaging Neutron and Gamma Ray Spectrometer
Wang, Shan	Kinetic Processes in Reconnection: Impact of Magnetospheric Hot O <sup>+</sup> and Cold Ions in Magnetopause Reconnection and Electron Heating in Magnetotail Reconnection

#### Plant Biology

Author	Dissertation Title
Mahoney, Lise L	Development of Genomic Resources and Identification of Marker-Trait Associations in Strawberry
Mortensen, Agnes Mols	The Foliose Bangiales (Rhodophyta) in the Northern Part of the North Atlantic and the Relationship with the North Pacific Foliose Bagiales- Diversity, Distribution, Phylogeny and Phylogenography

#### Psychology

Author	Dissertation Title
Cole, Lindsey M	Comparing Police Eyewitnesses and Lay Eyewitnesses: The Effect of Eyewitness Reputation and Procedural Justice on Juror Verdict Decisions
Lang, Jenny	Asymmetry in the Magnocellular and Parvocellular Pathways
Neal, Angela M	Examining Situations Involving Intimate Partner Aggression: A Dyadic Study of Agreement on Behaviors, Attributions, and Emotional Effects
Wormwood, Benjamin A	The Influence of Central Thalamus on Coding Properties of Prefrontal Cortex

#### Sociology

Author	Dissertation Title
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## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Carson, Jessica A	The Complexities of Family Health: Effects on Women's Employment Outcomes
Cutler, Matthew J	Seeing and Believing: The Emergent Nature of Extreme Weather Perceptions
Fox, Susan W	Life Interrupted: The Experience of Informal Caregivers of Aging Family Members
Ji, Kai	Child Abuse and Neglect in China: A Meta-Analysis
Keirns, Tracy A	Enduring Impact of Childhood Stressors on Adult Health: Testing Psychological and Behavioral Pathways
Parkhouse, Alex R	"Nobody Wants to Feel Different... But It's Just the Way it is": Experiences of Stigma and Other Stressors Among People Living with Psoriasis
Rogers, Luke T	Living on the Wrong Side of the Tracks: An Exploration of the Relation Between Demographic Change and Toxic Site Emissions
Ulrich-Schad, Jessica D	Migration, Views on Amenity-Led Development, and Making Community in Rural Recreation Counties in the U.S.
Young, Justin R	Social Capital in a Diversifying City: A Multi-Neighborhood Ethnographic Case Study

### Academic Year of Graduation: Fall 2013 to Summer 2014

#### Animal & Nutritional Sciences

Author	Dissertation Title
Cabral, Rosemarie	Improving Immune Status in the Neonatal Calf
Morrell, Jesse S	Metabolic Syndrome Among College Adults: Prevalence & Risk

#### Biochemistry

Author	Dissertation Title
Benton, Christopher S	Evaluating Taxonomic Variation, Ecology and the Transcriptome of <i>Codium fragile</i> in the NW Atlantic
Gaspar, John	Denosing Amplicon-Based Metagenomic Data
Kosugi, Takayoshi	Pharmacological Characterization of Lamprey Gonadotropin-Releasing Hormone Receptor-I and Identification and Functional Studies of an Ancestral Lamprey Glycoprotein Hormone



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### Chem:Chemistry Education

Author	Dissertation Title
Chan, Julia Y K	Effect of Students' Affective Characteristics on Learning and Achievement in First-Year General Chemistry
Pyburn, Daniel T	Investigations of Language Comprehension and Chemistry Education

#### Chemistry

Author	Dissertation Title
Brady, Elizabeth A	Evaluation of Phenolic Compounds in Sap From New Hampshire Sugar Maple Trees by Liquid Chromatography/Mass Spectrometry
Cahill, Katharine J	On the Nature of Things: Computational and Experimental Studies of Reactive Intermediates
Ding, Rui	Development of Ratiometric Fluorescent Cu(II) Indicators Based on Poly (N-isopropylacrylamide) (PNIPAM) Copolymers
Feddersen, Dara M	Mercury in the Atmosphere: Measurements of Particulate and Gaseous Forms in Several Different Ecosystems
Kilner, William C	The Chem-Math Project: Enhancing Success in General Chemistry Through the Integration of Mathematics, Problem Solving, and Conceptual Understanding: An Action Research Study
Massing, Justin	Design, Synthesis and Speciation of Bifunctional Ligands: Towards Ratiometric Fluorescent Metal-Ion Sensing
Morgan, Jessica P	Two Studies in Bio-Organic Chemistry and Toxicology: I. Protonation and Oxidation of Bridgehead Bicyclic Lactams (Models for Twisted Protein Linkages) II. Formation and Rearrangements of 2,3-Epoxyoxepins and Insights into Benzene
Thamatam, Rajesh	Pericyclic and Cationic Routes to Novel Organic Structures

#### Civil Engineering

Author	Dissertation Title
Garcia Palencia, Antonio Javier	A Frequency Response Functions-Based Model Updating Algorithm for Condition Assessment of In-Service Bridges

#### Computer Science

Author	Dissertation Title
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## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Hatem, Matthew T	Heuristic Search With Limited Memory
Wilt, Christopher M	Steps Towards a Science of Heuristic Search

#### Earth&Environmental Sci

Author	Dissertation Title
Andrews, Sarah E	Relationships Between Structure and Function: System Structure Matters Whether You Are in a Wetland or a College Classroom
Burakowski, Elizabeth A	Winter Climate Impacts of Historical Deforestation in New England
Corr, Chelsea A	The Analysis of in Situ and Retrieved Aerosol Properties Measured During Three Airborne Field Campaigns
Figueroa-Nieves, Debora	Impacts of Treated Sewage Effluents on Stream Ecology in Puerto Rico
Hunter, Maria O	Carbon Stocks and Cycling in the Amazon Basin: Measurement and Modeling of Natural Disturbance and Recovery Using Airborne Lidar
Kelsey, Eric P	Towards Understanding North Pacific Climate Variability With Instrumental and Ice Core Records
Swarthout, Robert F	Volatile Organic Compound Emissions From Unconventional Natural Gas Production: Source Signatures and Air Quality Impacts
Treat, Claire C	Effects of Climate Change on Carbon and Nitrogen Cycling in Permafrost Soils of Alaska

#### Economics

Author	Dissertation Title
Kozlova, Olesia	Imperfect Knowledge and Forward-Rate Bias in Developed and Developing Countries: Does Risk Matter?
Sullivan, Peter H	What Drives Exchange Rates? Reexamining the Exchange Rate Disconnect Puzzle
Trudeau, Jennifer M	Essays in the Economics of Reproductive Behaviors and Health Outcomes

#### Education

Author	Dissertation Title
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## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Gagnon, Douglas J	Understanding the Distribution of Teacher Effectiveness
Hubacz, Meghan E	How a Teacher's Sense of Self-Efficacy and Implicit Theory of Intelligence Relate to Student Achievement in Mathematics
McCart, Christine D	Exploring Outdoor Ethics Through the Lens of the Four Component Model: A Mixed Methods Study
Shirilla, Paul J	The Ability of Adventure Education to Influence the Social Skill Development of Urban Middle School Students

#### EES:Geology

Author	Dissertation Title
Cawthern, Thomas R	Reconstructing the Late Miocene to Recent Volcanic, Geologic, and Oceanographic Evolution in the Andaman Sea and Northern Bay of Bengal, Northeast Indian Ocean

#### Engineering:Mat Science

Author	Dissertation Title
Xu, Yi	Study of Organic Semiconductors I. Synthesis and Characterizations of Organothio- Substituted Diazapentacenes II. Syntheses and Self-Assembly of [60] Fullerene Derivatives of Pentacenes

#### English

Author	Dissertation Title
Finley, James	"Violence Done to Nature": Free Soil and the Environment in Antebellum Antislavery Literature
Portanova, Patricia A	The Rhetoric of Distraction: Exploring the Impact of Portable Media Technology on the Writing Process and Product of Student Writers
Wales-Freedman, Eden E	"This Thing We Have Done Together": Witnessing Race, Gender, and Trauma in Postbellum American Literature

#### Genetics

Author	Dissertation Title
Abebe-Akele, Feseha	A Study on a Nascent Entomopathogenic Association Between <i>Caenorhabditis Briggsae</i> and <i>Serratia</i> sp. SCBI.
Petersen, Lauren M	Identification of Virulence Factors in the Insect Pathogen <i>Serratia</i> Sp. Strain SCBI

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### History

Author	Dissertation Title
Finan, Barbara	"In South Barre, We're All Americans:" An Immigrant Mill Village Becomes Americanized, 1900-1950
Kilinc, Aykut	Ancient Passions and Ethnic Rivalries: The Limits of U.S. Foreign Policy During the Cyprus Crisis of 1974
Wolf, Kristen J	"Thy Children Shall Rise Up and Call Thee Blessed": The Transformation From Spiritual Custodians to Shaker Mothers, 1800-1940

#### Literacy&Schooling

Author	Dissertation Title
Swiger, Shannon B	Growing Teachers: The Practice of Teacher Leadership and its Implications for Professional Development in Literacy Instruction

#### Math Applied

Author	Dissertation Title
Morena, Matthew A	Mutual Stabilization of Chaotic Systems Through Entangled Cupolets

#### Mathematics

Author	Dissertation Title
Chen, Yanni	Functions Spaces Based on Symmetric Norms
Riepel, Brianna K	Brauer-Picard Groups of Pointed Fusion Categories

#### Mathematics Education

Author	Dissertation Title
Kim, Hyung Won	Developing Mathematics Teachers' Pedagogical Identity in the Classroom Context

#### Microbiology

Author	Dissertation Title
Furnholm, Teal R	Physiology and Genetics of Lead Resistance in Frankia
Hurst, Sheldon G	Natural Products and Nematode-Microbe Interactions



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### Nat Resrces & Envirn Stdy

Author	Dissertation Title
Algeo, Timothy P	Assessing Raccoon ( <i>Procyon lotor</i> ) Habitat Use and Predicting Potential Corridors for Rabies Spread with Maximum Entropy and Circuit Theory Modeling
Carlson, Martha R	Monitoring the Health of Sugar Maple, <i>Acer saccharum</i>
Coster, Stephanie S	Landscape Genetics of Pond-Breeding Amphibians in a Managed Forest
Klein, Emily S	Change in Nonlinear Dynamics and Spatial Structure of Coastal Socio-Ecological Systems: Bay of Fundy as Case Study
Nagy, Laura L	Vernon Bailey and Wolf Extermination: Economy, Ecology, and Progressive Era Policy
Read, Alesia N	Understanding the Role of Environmental Non-Governmental Organizations Within the Federal Fishery Management Council Process

#### Ocean Engineering

Author	Dissertation Title
Frank, Donya P G	Incipient Motion Within the Wave Bottom Boundary Layer
Rodriguez-Abudo, Sylvia B	Wave-Bottom Boundary Layer Dynamics over Rippled Beds

#### Physics

Author	Dissertation Title
Crew, Alexander B	Global Distribution of Microbursts in the Earth's Magnetosphere
Ertley, Camden D	Studying the Polarization of Hard X-Ray Solar Flares with the Gamma Ray Polarimeter Experiment (GRAPE)
Guo, Lijia	Plasma Instabilities in Large Scale Magnetic Reconnection Associated With Eruptive Solar Coronal Events
Liu, Yanhua	Heavy Ion Effects on Magnetic Reconnection in the Earth's Magnetotail
Sadler, Francis B	A Low-Level-Light Calibration Facility and Auroral Precipitation Driven Density Enhancement in the Cusp Two Topics in Thermosphere, Ionosphere, Magnetosphere Coupling
Wang, Liang	Integrating Kinetic Effects in Fluid Models for Magnetic Reconnection

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Young, Daniel E	Teaching Fluids to IPLS Students Via a Multiple-Scale Model and Mechanistic Reasoning

#### Plant Biology

Author	Dissertation Title
Eriksen, Renee L	Population Genetics and Organism-Environment Interactions of <i>Porphyra umbilicalis</i> Kutzing in the Gulf of Maine
Green-Gavrielidis, Lindsay Anne	Physiological Studies of Cultured New England Nori, <i>Porphyra umbilicalis</i> Kutzing and <i>Pyropia leucosticta</i> (Thuret) Neefus & J. Brodie, and Implications for Their Use in Integrated Multi-Trophic Aquaculture Systems

#### Psychology

Author	Dissertation Title
Jeleniewski, Stacy A	Expanding Legitimacy in the Procedural Justice Model of Legal Socialization: Trust, Obligation to Obey and Right to Make Rules
Kuwabara, Kie J	Can Autobiographical Memory Facilitate Children's Social Problem Solving?
Onos, Kristen D	Response Properties of Prefrontal Cortical Neurons in Rats Performing a Spatial Delayed Non-Matching to Position Task
Steiner, Kristina	Development of the Life Story in Adolescence

#### Sociology

Author	Dissertation Title
Mills, Meghan L	The Impact of Socioeconomic Status and Goal-Striving Stress on Depression and Delinquency Among Rural Youth

#### Statistics

Author	Dissertation Title
Lu, Kewei	On Fan's Adaptive Meyman Tests for Two Testing Problems in Time Series Analysis

#### Zoology

Author	Dissertation Title
Breton, Timothy S	Identification of Ovarian Gene Expression Patterns During Oocyte Growth in Atlantic Cod ( <i>Gadus morhua</i> )

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Chambers, Michael D	Research and Development of Steelhead Trout <i>Oncorhynchus mykiss</i> Aquaculture in Sea Cages
Heinisch, Gilad Nissim	Sexual Maturity of Western Atlantic Bluefin Tuna
Pugh, Tracy L	The Potential for Sperm Limitation in American Lobsters ( <i>Homarus americanus</i> ) as Indicated by Female Mating Activity and Male Reproductive Capacity

### Academic Year of Graduation: Fall 2012 to Summer 2013

#### Animal & Nutritional Sciences

Author	Dissertation Title
Allen, Jorie C	Test Model of a Healthy Lifestyle Intervention Program
Myers, Jay L	The Western Diet and Allergic Airway Disease-In Vitro Effects of Essential Polyunsaturated Fatty Acids and Adipokines on Changes to the Biochemical Phenotype of Alveolar Macrophages

#### Biochemistry

Author	Dissertation Title
Okamoto, Kazufusa	Patterns of Cytosine Methylation in the Genome of <i>Caenorhabditis Elegans</i>
Richardson, Roy L	The Identification and Characterization of the Interaction Between Upf1 and PAB1 During Nonsense-Mediated Decay & the Identification of Novel Protein Complexes Associated With Translation Termination Factor eRF1
Toth, Ronald T	Nonideality in High Concentration Solutions
Yao, Wei	Regulation of the Catalytic and Allosteric Properties of Photoreceptor Phosphodiesterase (PDE6) by the Glutamic Acid-Rich Protein-2 (GARP2)

#### Chemical Engineering

Author	Dissertation Title
Du, Wenxin	Iridium-Tin and Iridium-Rhodium-Tin Dioxide Nanoparticles as Anode Catalysts for Ethanol Oxidation Fuel Cell Reaction in Acidic Medium
Gagnon, Michael D	Engineering Lipases and Solvents for Trans/-Esterification of Used Vegetable Oils

# UNH Graduate School

## Doctoral Dissertations from Fall, 1990 to Present

### Chemistry

Author	Dissertation Title
Henderson, Carley S	I. The Tandem Chain Extension-Acylation Reaction II. Synthesis of Papyracilic Acid A: Application of the Tandem Homologation-Acylation Reaction III. Synthesis of Tetrahydrofuran-Based Peptidomimetics
Yao, Shaojun	Ratiometric CU(II) Indicators Based on Poly (N-Isopropylacrylamide) and Fluorescence Resonance Energy Transfer

### Civil Engineering

Author	Dissertation Title
Barbu, Iulia A	Development of Unsaturated Flow Functions for Low Impact Development Stormwater Management Systems Filter Media and Flow Routines for Hydrological Modeling of Permeable Pavement Systems
Senders, Jeffrey D	Approaches to Modeling Pathogen and Natural Organic Matter Removals in Slow-Rate Biofilters
Silva Medeiros Junior, Marcelo	Characterization of Low-Temperature Properties of Plant-Produced Rap Mixtures in the Northeast

### Computer Science

Author	Dissertation Title
Burns, Ethan A	Planning Under Time Pressure
Hagen, Mikkel T	Fairness in a Data Center

### Earth&Environmental Sci

Author	Dissertation Title
Alvarado Barrientos, Maria	Plant Water Use and Canopy-Fog Interactions Across a Land Use Change Trajectory of Pasture to Pine Reforestation in a Seasonally Dry Tropical Montane Cloud Belt
Vadeboncoeur, Matthew A	Mechanisms of Nutrient Limitation and Nutrient Acquisition in Managed and Unmanaged Forest Ecosystems

### Economics

Author	Dissertation Title
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## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Baycan, Ismail Onur	Nonlinear Markov Switching Analysis of Economic and Stock Market Dynamics for Emerging Market Economies
Beaudin, Laura B	Essays on Valuing Non-Market Goods in Imperfectly Competitive Markets
Sassi, Aliya	Essays on Motor Fuel Taxation and Price Dynamics
Stillwagon, Joshua R	Currency Risk and Imperfect Knowledge: Cointegrated Var Analyses with Survey Data
Udayanganie, Ambuldeniyage Don	Essays on Current Use Property Taxation

#### Education

Author	Dissertation Title
Dupuis, Juliann	Student Science Achievement and the Integration of Indigenous Knowledge in the Classroom and on Standardized Tests
Ellwood, Robin B	"I am a Scientist:" How Setting Conditions that Enhance Focused Concentration Positively Relate to Student Motivation and Achievement Outcomes in Inquiry-Based Science
Frenkiewich, Jeffrey C	Watching Children: A History of America's Race to Educate Kids and the Creation of the 'Slow-Learner' Subject
Jasinski, Barbara P	A Personal and Collaborative Journey of Change: Lessons Learned About Leadership, Mentoring and Motivation From an Educational Community's Work With Donald Graves
Mirkin, Benjamin J	Examining Social Climate and Youth Social Goals on Extended Wilderness Courses: A Path Toward Improving Participant Experiences
Noss, Eve I	Peer Mediation in Massachusetts Public Middle & High Schools Perceptions of Educators
Provost, Lauren E	The Multifaceted Nature of Mathematics Knowledge for Teaching: Understanding the Use of Teachers' Specialized Content Knowledge and the Role of Teachers' Beliefs from a Practice-based Perspective
Starbuck, J. David	Developing Competence: A Qualitative Inquiry of College Student Leadership in University Outdoor Orientation Programs

#### EES:Oceanography

Author	Dissertation Title
Rao, Shivanesh Arvinda	Interaction Between the Coastal Ocean and the Estuarine Systems



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### Electrical&Comp Engineering

Author	Dissertation Title
Medenica, Zeljko	Cross-Correlation Based Performance Measures for Characterizing the Influence of In-Vehicle Interfaces on Driving and Cognitive Workload

#### English

Author	Dissertation Title
Dougherty, Kimberly K	"Of the Sky Above You Must Beware": Airspace and Airpower in Twentieth Century Literature
Wilson, Maja J	Writing Assessment's "Debilatating Inheritance": Behaviorism's Dismissal of Experience

#### Genetics

Author	Dissertation Title
Shao, Lin	Characterization of the Expression Profile of Polyamine Biosynthetic Genes (Spermidine Synthase) and Polyamine Metabolic Regulation in Arabidopsis
Wang, Xin	Identification and Stoichiometric Analysis of the Monosomal Translational Complex

#### History

Author	Dissertation Title
Batterson, Sarah A	"An Ill-Judged Piece of Business": The Failure of Slave Trade Suppression in a Slaveholding Republic

#### Literacy&Schooling

Author	Dissertation Title
Tindall, Barbara W	Writing for Numbers: The Cultural Projection of Good Writers in the Time of High Stakes Writing Assessments

#### Materials Science & Engr

Author	Dissertation Title
Jiang, Bo	Morphological Study of Composite Latex Particles and Water Interaction with Polymer Chains

#### Mathematics

Author	Dissertation Title
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## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Laflamme, Eric M	Extreme Value Theory: Applications to Estimation of Stochastic Traffic Capacity and Statistical Downscaling of Precipitation Extremes

#### Mathematics Education

Author	Dissertation Title
Galle, Gillian E	What Do Students Do in Self-Formed Mathematics Study Groups?

#### Mechanical Engineering

Author	Dissertation Title
Drach, Andrii	Utilization of Copper Alloys for Marine Applications
Drach, Borys	Multiscale Numerical Modeling and Characterization of Carbon/Carbon Composites
Mehdi, Faraz	Mean Force Structure and Scaling of Rough-Wall Turbulent Boundary Layers

#### Microbiology

Author	Dissertation Title
Fiore, Cara L	Characterization of the Prokaryotic Community Associated With the Giant Barrel Sponge, <i>Xestospongia Muta</i> Across the Caribbean
Jeffrey, Lia K	Interactions of Shiga-Like Toxin-2 (STX-2) From <i>Escherichia Coli</i> O157:H7 and the BCL-2 Family of Proteins During Host Cell Programmed Cell Death

#### Nat Resrces & Envirn Stdy

Author	Dissertation Title
Ballestero, Heather R	Bacterial Biodegradation of Soluble Crude Oil Hydrocarbons and the Influence of Protists in Simulated Arctic Seawater and Sea Ice
Garner, Yvette L	The Effects of Biotic and Abiotic Factors on Byssogenesis, Growth and Movement Patterns of the Blue Mussel, <i>Mytilus edulis</i>
Jarema, Patricia M	The Role of Social Capital in Understanding Ecosystem Resilience with the Application of Spatial Extensions
MacLean, Meghan E	A Multi-Temporal Image Analysis of Habitat Modification in the Coastal Watershed, NH

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Matso, Kalle	Producing Science That Gets Used by Coastal Communities: What Funders Should Do to Link More Science with Decisions
Mitchell, Shelley F	An Empirical Investigation: How Small to Mid-Sized Enterprises Use Innovation on the Path Toward Ecological Sustainability

#### Physics

Author	Dissertation Title
Bhattacharyya, Jishnu	Aspects of Holography in Lorentz-Violating Gravity
Connor, Taylor P	Examining Celestial Polarization with the Gamma Ray Polarimeter Experiment (GRAPE)
Guo, Zhangbo	Observation of High Iron Charge States in Solar Energetic Particle Events
Jaynes, Allison N	Pulsating Aurora: Source Region & Morphology
Junnarkar, Parikshit Manoj	Light Hadron Properties From Lattice QCD
Pongkitiwanchakul, Peera	Wave-Particle Interactions in the Solar Wind and Solar Flares
Wang, Jun	Molecular Self-Assembly of Functionalized Pentacenes and Fullerenes on Metal Surfaces by STM and DFT Investigations
Xia, Qian	Perpendicular Ion Heating by Low-Frequency Alfvén-Wave Turbulence

#### Plant Biology

Author	Dissertation Title
Noseworthy, Jennifer B	Eating Quality and Variability in Carotenoid Content and Profiles in Winter Squash and Sweet Potato

#### Psychology

Author	Dissertation Title
Dudley, Kari L	Impressions of College Instructors: Stability and Change in Student Ratings
Lechak, Jennifer R	Investigating Priming, Inhibition, and Individual Differences in Visual Attention
Smith, Emily R	Enhancing Memory Access for Less-Skilled Readers
Warner, Timothy A	Intermittent Swim Stress Effects on Anxiety Behavior

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### Sociology

Author	Dissertation Title
Delaney, Aimee X	Violent Socialization Processes and Criminal Behavior: An International Perspective on Variations in Social Control During Late Adolescence and Emerging Adulthood
Redman, Amy L	Everyday Food Practices Among Three Low-Income Groups: Rural, Homeless, and Refugee
Vanderminden, Jennifer A	A Longitudinal Analysis of the Effect of Disability Type and Emotional/Behavior Problems on Different Forms of Maltreatment Across Childhood

#### Zoology

Author	Dissertation Title
Dodge, Kara L	Movements, Dive Behavior and Trophic Ecology of Leatherback Turtles ( <i>Dermochelys coriacea</i> ) in the Northwest Atlantic
Gurshin, Christopher WD	The Use of Multibeam and Split-Beam Echo Sounders for Assessing Biomass and Distribution of Spring-Spawning Atlantic Cod in the Gulf of Maine
Knapp, Jessica M	On the Reproductive Biology of the Western Atlantic Bluefin Tuna, <i>Thunnus Thynnus</i>
Lee, Wan-Jean	The Ecological Role of Feeding Disturbances of the Atlantic Horseshoe Crab, <i>Limulus Polyphemus</i>

### Academic Year of Graduation: Fall 2011 to Summer 2012

#### Chemical Engineering

Author	Dissertation Title
Cui, Yuanyuan	A Computational Fluid Dynamics Study of Two-Phase Flows in the Presence of Surfactants
Kreider, Ashleigh R	Mechanism of SPS Acceleration in a Peg Containing Copper Planting Bath

#### Chemistry

Author	Dissertation Title
Attwood, Alexis R	Cavity Ring Down: Construction, Validation and Experiments Measuring the Optical Extinction of Pure Clays and their Mixtures with Salts and Carboxylic Acids Under a Range of Atmospherically Relevant Conditions

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Kintigh, Jeremy T	Hydrogenation of Nanostructured Carbon, Synthesis of Organic Semiconductors and Progress Towards Synthesis of Fullerenes and Nanoribbons from Polyaromatic Hydrocarbons
Mazzone, Jennifer R	I. The Syntheses of Papyracillic Acids: Application of the Tandem Chain Extension-Acylation Reaction II. Diastereoselective Synthesis of B-Methyl- $\gamma$ -Keto Esters Through the Utility of an L-Serine Auxiliary

#### Computer Science

Author	Dissertation Title
Ma, Kevin J	Provider-Controlled Bandwidth Management for HTTP-Based Video Delivery
Thayer, Jordan T	Heuristic Search Under Time and Cost Bounds
Villa, Adam H	Transferring Big Data Across the Globe

#### Earth&Environmental Sci

Author	Dissertation Title
Davis, Shannon R	Marine Atmospheric Influences on Trace Gas Observations and Transport During the ICARTT 2004 Campaign
Espirito-Santo, Fernando Del Bon	Detection of Mortality in Tropical Forests Using Remote Sensing: From Treefall Gaps to Large Disturbances
Lai, Tzu-Ling	Occurrence of Major Ozone Episodes and their Time-Series Trends over the Past Decade in New England
Lombard, Melissa A	Trace Metal Applications in Atmospheric and Watershed Dynamics: Case Studies of Mercury Deposition in New England and Bedrock Groundwater - Surface Water Mixing
Nuss, Philip A	Comparative Systems Analysis of Thermochemical and Biochemical Recycling of Organic Waste Towards Industrial Feedstocks
Plagge, Amanda M	Observational Studies of Scatterometer Ocean Vector Winds in the Presence of Dynamic Air-Sea Interactions
Vincent, Robert E	Ecological Effects of Ditching and Ditch-Plugging in New England Salt Marshes

#### Economics

Author	Dissertation Title
Wright, Christopher	Essays on the Economics of Municipal and Household Solid Waste Disposal and Recycling

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### Education

Author	Dissertation Title
Bemis, Deborah A	Freedom of Speech and Student Conduct: Threats, Rights, and the Standard of Civility
Nolan, Carrie M	Educative Encounters: An Analysis of Dewey, Buber and Noddings to Understand the Role of Encountering Self, Others and the World in Teaching and Learning in Higher Education
Parker-Magagna, Martha A	Stuck in the Middle: A Case Study of Conflict Experiences by a First-Time Community College President
Rheingold, Alison A	Stories Worth Telling: How One School Navigates Tensions Between Innovation and Standards

#### Engineering:Civil

Author	Dissertation Title
Sandoval, Julian A	Liquefaction and Ring Shear Device

#### English

Author	Dissertation Title
Gillen, Katherine A	The Most Matchless Jewel: Economic Anxieties and Representations of Chastity on the Early Modern Stage
Hurwitz, Matthew J	1960's Travel Fiction and Englishness During the Postimperial Turn
Kramer-Simpson, Elisabeth A	Learning From Feedback: How Students Read, Interpret and Use Teacher Written Feedback in the Composition Classroom
Peterson, Michael K	Created in the Image of: Mormonism and the Rhetorical Production of Identity in Privately-Published Family Histories
Webber, James D	Towards Public Professionalism: A Pentadic Intervention in Debate Between the Common Core Standards Initiative (CCSI) and the National Council of Teachers of English (NCTE)

#### Genetics

Author	Dissertation Title
Ellis, Crystal N	Character Displacement in Burkholderia Biofilm Communities and the Effect of Adaptive History on the Evolution of Niche Breadth

#### History

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Aebel, Ian J	The Origins of American History in the Early Modern English Atlantic World
Parr, Jessica M	Inventing George Whitefield: Celebrity and the making of a Religious Icon
Rioux, Paula N	Shifting Alliances and Fairweather Friends: Luso-American Relations, 1941-1951

#### Materials Science & Engr

Author	Dissertation Title
Delisle, Dale A	The Impact of Multilayer Periodicity on Texture, Morphology, Chemical Stability and Matching Performance of Titanium Aluminum Nitride/Chromium Nitride Thin Films

#### Mathematics

Author	Dissertation Title
Yao, Shan	On Wavelet-Based Testing for Serial Correlation of Unknown Form Using Fan's Adaptive Neyman Method

#### Microbiology

Author	Dissertation Title
Arif, Muhammad	Calcium Homeostasis in Escherichia Coli
Jarett, Jessica K	Effects of Nitrogen-Fixing Symbiotic Cyanobacteria on the Microbial Ecology of the Coral, <i>Montastraea Cavernosa</i>

#### Nat Resrces & Envirn Stdy

Author	Dissertation Title
Coon, John R	Can We Get There From Here? Ecosystem Based Governance in the Bay of Fundy/Gulf of Maine Region
Hocking, Daniel J	The Role of Red-Backed Salamanders in Ecosystems
Johnson, Brad	Assessing Social-Ecological Resilience and Adaptive Capacity in the Face of Climate Change: An Examination of Three Communities in the Crown of the Continent Ecosystem
Osio, Giacomo Chato	The Historical Fisheries in the Mediterranean Sea: A Reconstruction of Trawl Gear, Effort and Trends in Demersal Fish Stocks
Saavedra Diaz, Lina Maria	Towards Colombian Small-Scale Marine Fisheries Management Hacia un Manejo de la Pesca Marina Artesanal en Columbia



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### Physics

Author	Dissertation Title
Connor, Hyun Ju	Cusp Ion Structures and their Relation to Magnetopause Processes
Gilson, Matthew L	Global Structure of the Nightshade Proton Precipitation during Substorms using Simulations and Observations
Liao, Jing	Statistical Study of O <sup>+</sup> Transport From the Cusp to the Plasmasheet
Lin, LiWei	High Lundquist Number Simulations of Parker's Model of Coronal Heating: Scaling and Current Sheet Statistics Using Heterogeneous Computing Architectures
Shubert, Christopher W	Artifact-Based Reflective Interviews for Identifying Pragmatic Epistemological Resources

#### Plant Biology

Author	Dissertation Title
Majumdar, Rajtilak	Polyamine Metabolism in Arabidopsis: Transgenic Manipulation and Gene Expression
Nettleton, Jeremy	Tracking Environmental Trends in the Great Bay Estuarine System: An Examination of Water Quality and Nuisance Macroalgal Blooms

#### Psychology

Author	Dissertation Title
Tornick, Jan K	An Investigation of Non-Spatial Cognitive Abilities in an Asocial Corvid, The Clark's Nutcracker ( <i>Nucifraga Columbiana</i> )
Trinkner, Rick J	Testing the Procedural Justice Model of Legal Socialization: Expanding Beyond the Legal World
Wells, Erika S	Processes Influencing Visual Awareness During Motion-induced Blindness

#### Sociology

Author	Dissertation Title
Cox, Genevieve R	Culture, Place, and Identity in a Mobile Community
Esala, Jennifer J	Anxious Lives: Tracing the Life Course of a Medical Diagnosis Through Illness Narratives

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Stransky, Michelle L	The Implications of Socioeconomic Status and a Usual Source of Care for the Health and Health Care Experiences of Elders with Chronic Illnesses

#### Zoology

Author	Dissertation Title
Bradt, Shane R	Development of Bio-Optical Algorithms to Estimate Chlorophyll in the Great Salt Lake and New England Lakes Using in situ Hyperspectral Measurements
Goldstein, Jason S	The Impact of Seasonal Movements by Ovigerous American Lobsters ( <i>Homarus Americanus</i> ) on Egg Development and Larval Release
Walsh, Michelle L	Flatfish Stock Enhancement: Examining Conditioning Strategies to Promote Success

### Academic Year of Graduation: Fall 2010 to Summer 2011

#### Animal & Nutritional Sciences

Author	Dissertation Title
Bubley, Walter J	Updated Life History and Population Structure Assessment of Spiny Dogfish, <i>Squalus Acanthias</i> , in the Gulf of Maine

#### Biochemistry

Author	Dissertation Title
Sung, Way	Study of the Rate and Spectrum of Spontaneous Mutations
Zhang, Chongxu	Identifying Novel Proteins in Translation Complex by Using Analytical Ultracentrifugation With Fluorescent Detection System

#### Chemistry

Author	Dissertation Title
Bubnis, Gregory J	Modeling the Self-Assembly of Functionalized Fullerenes on Solid Surfaces Using Monte Carlo Simulations
Haase, Karl B	Calibration, Optimization, and Deployment of PTR-MS Instruments During the Airmap Project
Taschner, Ian S	I. Progress Toward the Synthesis of Plakortether B Through A Zinc-Mediated Homologation II. Synthesis of Novel Hydroxy-Cyclopropyl Peptide Isosteres

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Terova, Ilia	Chromatographic Studies and Analytical Methods Development for Selected Tetraazamacrocycles and Their Cu(II) Complexes

#### Civil Engineering

Author	Dissertation Title
Krishna Swamy, Aravind	Evaluating Mode of Loading Effect and Laboratory Fatigue Performance of Asphalt Concrete Using Viscoelastic Continuum Damage Mechanics

#### Computer Science

Author	Dissertation Title
Pineo, Daniel S	The Application of Computational Modeling to Data Visualization

#### Earth&Environmental Sci

Author	Dissertation Title
Carlson, Cynthia H	Efficiency of the Built Environment: Interdependencies in Transportation, Development Form and Public Health
Contosta, Alexandra R	Seasonal, Biogeochemical, and Microbial Response of Soils to Simultaneous Warming and Nitrogen Additions
Kim, Su Youn	Continental Outflow of Polluted Air from the U.S. to the North Atlantic and Mercury Chemical Cycling in Various Atmospheric Environments

#### Economics

Author	Dissertation Title
Banerjee-Chakraborty, Arpita C	Studies in Indian Informal Sector
Mangee, Nicholas J	The Puzzle of Long Swings in Equity Markets: Which Way Forward?

#### Education

Author	Dissertation Title
Carter, Mary H	Independently Innovative: Teachers and Change in Successful Schools
Davis, Roland S	The Deconstruction of Ambition: Campus Climate, Stereotype Threat, and the Motivational Goals of African American Students at a Selective Small Liberal Arts College



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Kortz, Kirsten N	Linking Goals to Outcomes: Exploring Students' Achievement Goals, Strategy Use, and Standards of Success for Learning
Malloy, JoAnne M	"If We Want an Education, We Want an Education. It's Our Choice:" How Four Youth at Risk of Dropping Out of High School Experienced Social Capital
Rohde, Leigh E	Preschool Teachers' Beliefs and Practices: Emergent Literacy in Inclusive Preschools
Young, Michael C	An Analysis of Appreciative Inquiry as Organizational Development for an Alternative School

#### EES:Oceanography

Author	Dissertation Title
Goodwin, Deborah S	Satellite-Derived Fluorescence Quantum Yields as Indicators of Phytoplankton Photophysiology
Novak, Alyssa B	Unraveling the Mystery of Leaf Reddening in Seagrasses

#### Electrical&Comp Engineering

Author	Dissertation Title
Chen, Gang	Design of a Low Power Switched-Capacitor Pipeline Analog-to-Digital Converter

#### Engineering:Mat Science

Author	Dissertation Title
Pramanik, Chandrani	Chemistry of Acenes, [60]Fullerenes, Cyclacenes and Carbon Nanotubes

#### English

Author	Dissertation Title
Manning, Amy L	Raping the Raced Body: Trauma in Asian North American Women's Literature
Peary, Alexandria J.	The Self-Help of Composition: Peter Elbow's Writing Without Teachers, Composition Studies, and the Extracurriculum
Siik, Melissa K	"The Alien Within": Residual Catholicism and the Emerging National Identity of Post-Reformation England
Williams, Jason R	Competing Visions: Women Writers and Male Illustrators in the Golden Age of Illustration

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### History

Author	Dissertation Title
Mandel, Jennifer M	Making a "Black Beverly Hills": The Struggle for Housing Equality in Modern Los Angeles
Pastore, Christopher L	From Sweetwater to Seawater: An Environmental History of Narragansett Bay, 1636-1849

#### Materials Science & Engr

Author	Dissertation Title
Augustyniak, Anita	In-Situ Early Detection of Metal Corrosion Via "Turn-On" Fluorescence in "Smart" Epoxy Coatings

#### Mathematics

Author	Dissertation Title
Brazas, Jeremy T	Homotopy Mapping Spaces
Wu, Jinsong	On Decompositions and Connes's Embedding Problem of Finite Von Neumann Algebras
Yuan, Chengwei	Models and Methods for Computationally Efficient Analysis of Large Spatial and Spatio-Temporal Data

#### Mathematics Education

Author	Dissertation Title
Generazzo, Susan D	Proof and Reasoning in an Inquiry-Oriented Class: The Impact of Classroom Discourse

#### Mechanical Engineering

Author	Dissertation Title
Hasan, Raed Zuhair	Analytical and Numerical Prediction of Localized Necking in Sheet Metal Forming Processes

#### Microbiology

Author	Dissertation Title
Mahoney, Jennifer C	Existing Regulatory Circuitries Govern Backbone and Acquired Host Association Factors in the Human Pathogen <i>Vibrio Parahaemolyticus</i>

#### Nat Resrces & Envirn Stdy



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Lord, Fabienne	An Exploratory Approach to Social Impact Assessment of Public Policy Decisions: Multiple Stakeholders Perspectives on the Social Impact of Overfishing in New England Groundfisheries in the 1990s
Nery Nascimento, Lucigleide	The Long Journey to Become the 'River of National Unity': The Sao Francisco River Basin from 1940s to 2008 and the Interactions of Environment, Government and Local Citizens
Rogers, Shannon H	Examining the Relationship Between Social Capital and the Built Environment: A Case Study in Measuring Community Sustainability
Traister, Elena	Effects of Physical and Chemical Disturbance on Stream Ecosystem Structure and Function

#### Ocean Engineering

Author	Dissertation Title
DeCew, Judson C	Development of Engineering Tools to Analyze and Design Flexible Structures in Open Ocean Environments

#### Physics

Author	Dissertation Title
Black, Carrie	The Effects of Weak Collisions on Nonlinear Plasma Kinetics
Dregely, Isabel M A	Hyperpolarized <sup>129</sup> XE Magnetic Resonance Imaging of Functional Lung Microstructure
Qian, Xin	Computational Studies of Nonlinear Dispersive Plasma Systems
Ren, Guoqin	Aspects of String Compactification
Woolf, Richard S	Development and Characterization of a Fast Neutron Imaging Telescope (FNIT) for 1-20 MeV Neutrons from the Sun and Nuclear Material

#### Psychology

Author	Dissertation Title
Bemis, Rhyannon H	"I Remember When You Taught Me That!" Developmental and Gender Differences in Children's Episodic Memories of Learning Events During the Early School Years
Dobias, Joshua J	Ocular Dominance and Temporal Dynamics in the Venetian Blind Effect

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Hembrook-Short, Jacqueline R	The Role of Reuniens and Rhomboid Thalamic Nuclei in Spatial Memory
Overson, Catherine E	Three Elements of Self-Regulated Learning: Metacognitive Functioning, Self-Efficacy, and Study Behavior
Rogers, Rachel A	The Role of Personal and Contextual Variables in College Students' Academic Achievement
Sahin-Acar, Basak	The Effect of Culture and Self-Construal on Memory Development: Mother-Child Conversations in Eastern Turkey, Western Turkey and the United States

#### Sociology

Author	Dissertation Title
Bramlett, Stephanie S	Decoding Minority Student Retention: An Investigation of Student Experiences and Institutional Characteristics
Turcotte-Seabury, Catherine A	Wage Employment, Traditional Subsistence, and Aspirations Among Inupiat and Yup'ik in the Mixed Economy of Northwest Alaska

#### Systems Design

Author	Dissertation Title
Suprock, Christopher A	Wireless Sensor Integrated Tool for Characterization of Matching Dynamics in Milling

### Academic Year of Graduation: Fall 2009 to Summer 2010

#### Animal & Nutritional Sciences

Author	Dissertation Title
Marston, Susan P	Maximizing Profit on New England Dairy Farms: An Economic Comparison of Four Total Mixed Rations for Organic Holsteins and Jerseys

#### Chemical Engineering

Author	Dissertation Title
Chen, Yi-Hsin	A Rotating Ring-Disk Study of Interactions Among SPS, Cuprous Ions, and Oxygen

#### Chemistry

Author	Dissertation Title
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## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Ambrose, Jesse L	Volatile Organic Compounds in the New England Troposphere: Atmospheric Chemistry and Measurement Techniques
Du, Jie	Ratiometric Fluorescent Metal Ion Indicators Based on Functionalized Poly (N-Isopropylacrylamide)
Jacobine, Alexander M	I. Ceric Ammonium Nitrate-Mediated Oxidative Cleavages of Hemiacetals II. Synthesis of B-Proline Derivatives Through the Tandem Chain Extension-Imine Capture Reaction
Kopreski, Ryan P	Computational and Experimental Studies of Acenes, Starphenes and [60]Fullerene Derivatives
Osambo, John O	Chemical Sensors Based on Swellable Polymer Microparticles and Molecular Imprinted Polymers
Young, Matthew J	Development of Nitrogen Protecting Groups and Synthesis and Complexation of Bridged Bistetraazamacrocycles

#### Computer Science

Author	Dissertation Title
Bhatia, Swapnil Prakash	Topics in Access, Storage, and Sensor Networks

#### Economics

Author	Dissertation Title
Saha, Shrawantee	Essays on Environmental Regulations and Performance of Firms
Zheng, Liping	The Puzzling Behavior of Equity Returns: The Need to Move Beyond the Consumption Capital Asset Pricing Model

#### Education

Author	Dissertation Title
Blatt, Erica	An Ethnographic Investigation of the Process of Change in Students' Environmental Identity and Pro-Environmental Behavior in an Environmental Science Course
Charles, Anita S.	"It's Just Part of What We Do": Adolescent Interactions with Multimodal Texts Across Social Spaces
Craig, Patricia J	Moving Beyond Entry-Level Competencies: The Role of the Recreation Management Internship in the Moral Development of College Students
Henley, Antonio	Educator Perceptions of Policies that may Impact Black Male High School Persistence





## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Parse, Rachel	Navigating the Cultural Gaps: Whiteness and Diversity in two Elementary School Classrooms
Perks, Kevin	Moving Beyond Time and Choice: Challenge, Motivation and Achievement During Independent Reading in High School
Self, Carina E	Teaching, Activism, and the Purposes of Education: Toward an Integrated Vision of Teachers' Work
Zarnowski, Brenda J	Parent and Teacher Perceptions of School Partnerships in New Hampshire Schools

#### Electrical&Comp Engineering

Author	Dissertation Title
Shyrokov, Oleksandr	Human-Human Multi-Threaded Spoken Dialogs in the Presence of Driving

#### Engineering:Electrical

Author	Dissertation Title
Luo, Yifei	A High Speed Serializer/Deserializer Design

#### Engineering:Systems Design

Author	Dissertation Title
Kim, Hyomin	Development of Ground-Based Search-Coil Magnetometer Systems in the Polar Regions and Studies of ULF Pc 1-2 Wave Propagation in the Ionospheric Waveguide

#### English

Author	Dissertation Title
DePalma, Michael-John	Archiving the Sacred: Austin Phelps and the Adaptation of Nineteenth-Century Rhetorical Education at Andover Theological Seminary
Garcia, Mike L	Politics and Ethics of Student Self-Assessment in the Composition Classroom
Imbracsio, Nicola M	Corpses Revealed: The Staging of the Theatrical Corpse in Early Modern Drama
Ringer, Jeffrey M	Who Do I Say I Am? Evangelical Identity and Academic Writing
Simpson, Steven W	Learning Systems: An Ecological Perspective on Advanced Academic Literacy Practices of Multilingual Writers

# UNH Graduate School

## Doctoral Dissertations from Fall, 1990 to Present

### History

Author	Dissertation Title
Fuhrer, Mary B	"This Wilderness World":The Evolution of a New England Farm Town, 1820-1840
Mann, Alison T	Slavery Exacts and Impossible Price:John Quincy Adams and the Dorcas Allen Case, Washington, D.C.
Parmelee, Deena L	Creek Diplomacy in an Imperial Atlantic World
Seifert, Erica J	Campaigning for Authenticity

### Materials Science & Engr

Author	Dissertation Title
Filoti, Dana I	Microstructural Evolution of Sputtered Phase Segregated Metal Composite Thin Films

### Mathematics

Author	Dissertation Title
Greenough, Justin R	Bimodule Categories and Monoidal 2-Structure
Johnson, Jeremiah W	Admissible Orders on Quotients of the Free Associative Algebra
Li, Qihui	MF Algebras and a Bishop-Stone-Weierstrass Theorem Result
Liu, Zhe	Von Neumann Algebras, Affiliated Operators and Representations of the Heisenberg Relation

### Mathematics Education

Author	Dissertation Title
Abel, Todd A.	The Impact of a Mathematics Research Experience on Teachers' Conceptions of Student Learning
Baccaglioni-Frank, Anna E.	Conjecturing in Dynamic Geometry: A Model for Conjecture-Generation Through Maintaining Dragging

### Mechanical Engineering

Author	Dissertation Title
Guleryuz, Canan G	Fabrication and Tribology of Composite Coatings Incorporating Solid Lubricant Micro-Reservoirs

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Yalcin, Cuneyt	Milling Cutter Software Architecture for Force and Surface Finish Modeling

#### Microbiology

Author	Dissertation Title
Poltak, Steffen R	Experimental Evolution of Burkholderia Cenocepacia Biofilm Populations
Shara, Kate P	Factors Regulating the Production of STX-2 in Escherichia coli O157:H7

#### Nat Resrces & Envirn Stdy

Author	Dissertation Title
Cournane, Jamie M	Spatial Management of Groundfish Resources in the Gulf of Maine and Georges Bank
Friedman, Mary A	Social Science and Social Capital in the Lamprey River Watershed: A Resident Survey for Community and Environmental Planning and Predicting Support for Innovative Land Use
Powers, Arthur G	An Initial Evaluation of Market-Based Land Reform in Brazil: Can it Create Sustainable Communities?
Tardie, Peter S	Land Development in Massachusetts: Its Effect on the Environment Within Essex and Middlesex Counties from 1990 to 2007
Trubetskova, Irina	From Biosphere to Noosphere: Vladimir Vernadsky's Theoretical System as a Conceptual Framework for Universal Sustainability Education
Washburn, Erika L	To Pave Or Not To Pave: A Social Landscape Analysis of Land Use Decision-Making in the Lamprey River Watershed

#### Physics

Author	Dissertation Title
Jones, Sarah L	Space- and Ground-Based Observations of Pulsating Aurora
Miao, Bin	Local Structure of Earth's Quasi-Perpendicular Bow Shock
Morgan, Trevor K	Measurements of the 2001 April 15 and 2005 January 20 Ground-Level Enhancements by the Milagro Water Cerenkov Detector
Zana, Lorenzo	Search for the Onset of Color Transparency through p0 Electroproduction on Nuclei

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### Psychology

Author	Dissertation Title
Bucolo, Donald O	Violent video Game Exposure and Physical Aggression in Adolescence: Tests of the General Aggression Model
Dickson, Ryan A	The Reminiscence Bump in Autobiographical Memory: An Investigation of the Life Script Hypothesis
Hussey, Heather D	Predicting Inclusive Teaching using the Transtheoretical Model of Behavior Change and the Theory of Planned Behavior
Ramsey, Matthew A	Sophisticated Credulity: Are Old Beliefs Disguised by New Terminology and Selective Learning?
Stiegler-Balfour, Jennifer Jasmin	Comprehension of Protagonists' Goals and Intentions: The Dynamic Relation Between Reading Skill, Text Characteristics, and Reading Strategies

#### Sociology

Author	Dissertation Title
Colocousis, Chris R	Community Change in the Northern Forest
Dawson, D Jean	Competencies and Problems of Poor and Non-Poor American Emerging Adults
Medeiros, Rose A	Adolescent Sexual Orientation and Parent-Child Relationship Quality

#### Zoology

Author	Dissertation Title
Altman, Irit	Trematode Parasites of the Mudsail Ilyanassa Obsoleta: An Analysis of Parasite Communities at Different Scales
Auker, Linda A	The Effects of Didemnum Vexillum Overgrowth on Mytilus Edulis Biology and Ecology
Golet, Walter J	Somatic Condition, Growth and Distribution of Atlantic Bluefin Tuna (Thunnus Thynnus) in the Gulf of Maine
Logan, John M	Tracking Diet and Movement of Atlantic Bluefin Tuna (Thunnus Thynnus) Using Carbon and Nitrogen Stable Isotopes
Potter, Inga F	Movement and Behavior of Ocean Sunfish, Mola Mola, in the Northwest Atlantic

### Academic Year of Graduation: Fall 2008 to Summer 2009

#### Biochemistry

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Champagne, John C	"Chasing a Ghost" Addressing the Opalescence/Aggregation Relationship of an IgG 1 Antibody
Kavanaugh, Scott I	Gonadotropin Releasing Hormone in Agnathans
Struwe, Weston B	Modeling Congenial Disorders of Glycosylation in C. Elegans: Genetic Influences and Structural Consequences of N-Linked Glycosylation

#### Chemistry

Author	Dissertation Title
Odendaal, Antoinette Y	A Modified Synthesis, C-Functionalization, Resolution and Racemization Kinetics of Cross-Bridged Tetraazamacrocycles
Stigers, Dannon J	Synthesis of Unsymmetrical Pendant-Armed and Phosphonic Acid-Pendant-Armed Cross-Bridged Tetraazamacrocycles
Zhou, Hui	Clycan Characterizations with Application in Metal Ion Binding, the 1918 Influenza Virus Neuraminidase Formation and Human Receptors

#### Earth&Environmental Sci

Author	Dissertation Title
Hegarty, Jennifer D	Synoptic Controls on Ozone over the Northeastern U.S. and Continental Export
Russo, Rachel S	Temporal Variation, Regional Sources, and Removal Processes of Volatile Organic Compounds in New England
Strauss, William S	The Fallacy of Endless Growth Exposing Capitalism's Insustainability
Ziemba, Luke D	Ambient Measurements of Chemical and Physical Properties of Organic Aerosols: Insights into Formation, Growth, and Heterogeneous Chemistry

#### Education

Author	Dissertation Title
Tatar, Nicholas A	Flow Within the Engineering Pipeline: Motivation of High-Achieving Students During the High School to College Transition
Townson, Lisa L	Engaged Scholarship at Land-Grant Institutions: Factors Affecting Faculty Participation
Wu, Lei	Understanding SLA through Peer Interactions in a Chinese Classroom: A Sociocultural Perspective

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### Engineering:Civil

Author	Dissertation Title
Carpenter, Alberta C	Sustainable Management of Industrial Capital: LCA and Spatial Analysis in Decision Making for Beneficial use of Industrial By-Products
Prieto Piedrahita, Rafael Antonio	Treatment of Contaminated Sediments using Reactive Cap Technology: Characterization and Modeling of Geotechnical, Hydraulic and Contaminant Transport Behavior of Cap-Sediment Systems
Ray, Ram Lakhan	Landslide Susceptibility Mapping through Enhanced Dynamic Slope Stability Analysis using Earth Observing Satellite Measurements

#### Engineering:Electrical

Author	Dissertation Title
Chitambar, Abhijit S	A System Model for the Effect of Polarization Mode Dispersion on Digital Modulated Optical Signals in Single Mode Fibers
Dalton, Mike	The Effect of Component Recognition on Flexibility and Speech Recognition Performance in a Spoken Question Answering System
Vidacic, Dragan	Biologically Inspired Feature Extraction for Rotation and Scale Tolerant Pattern Analysis

#### Engineering:Mat Science

Author	Dissertation Title
Quincy, Anne S.	Synthesis and Characterization of Functional Polymers with Controlled Architecture and their Application as Anticorrosion Primers
Zguris, Zachary Z	Ion Sequestration Particles for Naval Anticorrosion Coatings

#### Engineering:Mechanical

Author	Dissertation Title
Parasiz, Sunal A.	Investigation and Characterization of Size Effects in Microforming Processes

#### Engineering:Ocean

Author	Dissertation Title
Mulukutla, Gopala K	Determination of Geotechnical Properties of Seafloor Sediment using a Free Fall Penetrometer



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### English

Author	Dissertation Title
Hanson, Joleen R	Knowing More Than They Can Tell: An Assessment of Genre Awareness Among Students in Writing Intensive Zoology and Civil Engineering Courses
Healey, Christina L	Excavating the Landscapes of American Literature: Archaeology, Antiquarianism, and the Landscape in American Women's Writing, 1820-1890
Massey, Christopher S	Absent Meaning: Fascination, Narrative, and Trauma in the Holocaust Imaginary
Rodgers, Meagan S	"Racism is a Misunderstanding": Rhetorically Listening to White Students' Performances of Race
Walters, Kuhio	Arresting Beauty, Framing Evidence: An Inquiry into Photography and the Teaching of Writing

#### Genetics

Author	Dissertation Title
Tucker, Abraham E	Genetic Variation within the <i>Daphnia Pulex</i> Genome

#### History

Author	Dissertation Title
Andrews, Edward E	Prodigal Sons: Indigenous Missionaries in the British Atlantic World, 1640-1780
Askins, Kathryn A	Bridging Cultures: American Indian Students at the Northfield Mount Hermon School
Grasso, Glenn M	The Maritime Revival: Antimodernity, Class, and Culture, 1870-1940
Upham-Bornstein, Linda	The Taxpayer as Reformer: 'Pocketbook Politics' and the Law, 1860-1940

#### Mathematics

Author	Dissertation Title
Eroshkin, Oleg	Invariant Frechet Algebras on Bounded Symmetric Domains
Liu, Juan	Wavelet Regression with Long Memory Infinite Moving Average Errors
Li, Weihua	Free Entropy Dimensions and Approximate Liftings

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Ravichandran, Mohan	Kadison-Singer Algebras with Applications to Von Neumann Algebras
Rojas-Arenaza, Miriam	Mathematics of Double-Walled Nanotube Model: Asymptotic Spectral and Stability Analysis
Shubov, Mikhail V	Improved Estimation of Fourier Coefficients for Ill-Posed Inverse Problems
Yuan, Wei	Kadison-Singer Algebras

#### Mathematics Education

Author	Dissertation Title
Paddack, Megan E	The Process of Making Meaning: The Interplay Between Teacher's Knowledge of Mathematical Proofs and their Classroom Practices

#### Nat Resrces & Envirn Stdy

Author	Dissertation Title
DeLauer, Verna G	The Mental Demands of Marine Ecosystem-Based Management: A Constructive Developmental Lens
French, Charles A	The Social Production of Community Garden Space: Case Studies of Boston, Massachusetts and Havana, Cuba
Hopkins, Mary H.	A Wild Web: The Tangled History of Attitudes Toward Wildlife in a Dynamic New England Culture, 1945-1985
Zollett, Erika A	Conserving Dolphins and Fishermen: Combining Science and Local Knowledge to Reduce Cetacean Bycatch

#### Physics

Author	Dissertation Title
Deniz, Derya	Texture Evolution in Metal Nitride (AlN, TiN, HfN) Thin Films Prepared by Off-Normal Incidence Reactive Magnetron Sputtering
Simunac, Kristin D	Solar Wind Stream Interfaces: The Importance of Time, Longitude, and Latitude Separation Between Points of Observation
Torok, Aaron M	Hadron-Hadron Scattering in Lattice Quantum Chromodynamics

#### Plant Biology

Author	Dissertation Title
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## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Day, Jennifer P	The Development of a Modular Integrated Recirculating Aquaculture System Using Porphyra (NORI) for the Bioremediation of Marine Finfish Effluent
Wiley, Priya S	Photosynthetic and Oxidative Stress in the Green Alga <i>Dunaliella Tertiolecta</i> : The Effects of UV-B and UV-A Radiation

#### Psychology

Author	Dissertation Title
Dillen, Bethany F	The Effects of Documentation on Young Children's Memory
Faber, Michael A	Understanding Personality Through Preferences in Popular Mass Media: An Archetypal Approach
Gilman, Anne T	Keeping Visual-Auditory Associations in Mind: The Impact of Detail and Meaningfulness on Crossmodal Working Memory Load
Perrin, Jeffrey L	Emotional Responses to Environmental Messages: Implications for Future Environmentally Responsible Behavioral Intentions
Wilkins, Lori N	Executive Control in the Anterior Cingulate Cortex

#### Sociology

Author	Dissertation Title
Eaton, Jeffrey A	The Effect of Peer and Parental Smoking on Adolescent Smoking Initiation: Exploring Potential Moderators
Savage, Sarah A	Instability Among Middle Class Families and the Impact of Health Insurance

### Academic Year of Graduation: Fall 2007 to Summer 2008

#### Animal & Nutritional Sciences

Author	Dissertation Title
Anderson, Janet	Differentially Expressed Genes in Aortic Cells From Atherosclerosis-Resistant and Atherosclerosis-Susceptible Pigeons
Dunn, Rebecca L	Biomonitoring Polybrominated Diphenyl Ethers in Lactating Women
Schuling, Sarah E	Evaluation of In Vitro Methods to Estimate Digestibility of Amino Acids in the Rumen Undegraded Protein Fraction of Feedstuffs

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### Biochemistry

Author	Dissertation Title
Langhorst, Bradley W	A System For Automating The Interpretation of Analytical Ultracentrifuge Data

#### Chemistry

Author	Dissertation Title
Arigi, Emma A	Development and Application of Methods for Analysis of Fungal Glycosphingolipid Structure and Functional Interactions
Kennedy, Daniel P	I. The Synthesis and Coordination Chemistry of Novel 1,1,1-Tris(Aminomethyl)Ethane (Tame) Derived Ligands and Their use as size Selective Fluorescent ZN(II) Sensors. II. The Synthesis of Strongly and Weakly Binding Ligands with N,O
Rainbolt, James E	Probing Regioselectivity in the Diels-Alder Cycloadditions Between [60]Fullerene and Aryl Substituted Acenes

#### Earth&Environmental Sci

Author	Dissertation Title
Cai, Xuyi	Secondary Organic Aerosol Formation of Relevance to the Marine Boundary Layer
White-Jeanneau, Marguerite L	Sources and Sinks of Selected Trace Gases in the Tropospheric Boundary Layer of the Eastern United States

#### Earth Science: Oceanography

Author	Dissertation Title
Moore, Timothy S	Dynamics of Phytoplankton Community Composition in the Western Gulf of Maine

#### Economics

Author	Dissertation Title
Page, Timothy F	Behavioral Responses to Public Insurance Programs: Three Essays

#### Education

Author	Dissertation Title
Hanser, Gretchen A	Investigating the Effects of Integrated Systematic Decoding, Spelling and Communication Instruction for Students with Complex Communication Needs



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Moran, M Brooke	Urban Middle School Teachers' Efficacy Change Resulting from Project Adventure's Year-Long Respect Curricular Intervention: A Quasi-Experimental Design with Corroborating Data
Peterson, Barbara A	Indoctrination In Education: Offering An Alternative Conception

#### Engineering:Civil

Author	Dissertation Title
Avellaneda-Lopez, Pedro Mauricio	A Bayesian Stormwater Quality Model and its Application to Water Quality Monitoring
Hadnagy, Emese	Polychlorinated Biphenyl Dechlorination with Palladized Magnesium - Development of a Sediment Remediation Technology
Sharma, Bhawana	Evaluation of Reactive Cap Sorbents for in-situ Remediation of Contaminated Sediments

#### Engineering:Electrical

Author	Dissertation Title
Melnyk, Pavlo	Biologically Inspired Composite Image Sensor for Deep Field Target Tracking

#### Engineering:Ocean

Author	Dissertation Title
Pattursson, Oystein	Flow Through and Around Fish Farming Nets

#### Engineering:Systems Design

Author	Dissertation Title
Mocny, Jakub	Error Propagation in Pattern Recognition Systems: Impact of Quality on Fingerprint Categorization

#### English

Author	Dissertation Title
Califano, Sharon K	The Comradeship of the "Happy Few": Henry James, Edith Wharton, and the Pederastic Tradition
Hirsh-Dickinson, Sally R	Dirty Whites and Dark Secrets: Sex and Race in Peyton Place

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Knoblauch, Alison A	Teaching Toward Understanding: Feminist Rhetorical Theories and Pedagogies in the College Composition Classroom

#### Genetics

Author	Dissertation Title
Lee, Darren J	The Function of PAB1 in Translation and in PUF3 Dependent Deadenylation

#### History

Author	Dissertation Title
Lewis, Keri E	Negotiating For Nature: Conservation Diplomacy and the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere, 1929-1976

#### Literacy&Schooling

Author	Dissertation Title
Marshall, Jennie A	Where the Inchoate Seeks Form: Autobiographical Curriculum Inquiry in Women's Rowing
Schlichter, Phyllis B	How Spanish-Speaking Parents Understand Kindergarten And Support Their Children's Education Within The Context of A School

#### Mathematics

Author	Dissertation Title
Das, Paramita	Planar Algebra of Families of Subfactors
Fang, Junsheng	Unitarily Invariant Norms and Tensor Products of Maximal Injective Von Neumann Subalgebras

#### Microbiology

Author	Dissertation Title
Spenlinhauer, Tania R	The Development of Tools to Allow Genetic and Genomic Analysis of Frankia
Wright, Christine N	Evaluation of an Enhanced Magneto-Chemical Process for the Removal of Pathogens in Wastewater

#### Nat Resrces & Envirn Stdy



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Claesson, Stefan H	Sustainable Development Of Maritime Cultural Heritage In The Gulf Of Maine
Lough, John A	Stratified-Drift Aquifers in New Hampshire with Potential to Serve as Future, Large Public Water-Supplies: Status, Circa 200; Projected Losses, Circa 2025; and Data Accuracy
Mitchell, Clayton R	The Local Land Use Process in New Hampshire: Does it Contribute to Sprawl?
Ochieng, Caroline A	Survival Strategies of Eelgrass in Reduced Light

#### Physics

Author	Dissertation Title
Briggs, Michael S	A Fundamental Analysis of Means of Producing and Storing Energy
Nenchev, Georgi N	Nanotemplate Creation And Self-Assembly On The (111) Surface Of Gold
Seaton, Daniel B	An Anlysis of Reconnection Dynamics in an Eruptive Flare Model
Sun, Jiebing	Surface Structure and Composition Determination by Low-Energy Electron Scattering and Monte Carlo Simulations

#### Plant Biology

Author	Dissertation Title
Mohapatra, Sridev	Understanding Polyamine Metabolism Through Transgenic Manipulation In Poplar Suspension Cultures
Wang, Enhua	Identification and Characterization of Protein Phosphatase 2A Mutants in Arabidopsis Thaliana

#### Psychology

Author	Dissertation Title
Dupuis, Erin G	Illusory Judgements Under Conditions of Uncertainty Reasoning Errors Related to Paranormal and Religious Beliefs
Hetley, Richard S	The Venetian Blind Effect, Binocular Luster, and Binocular Rivalry
Lassonde, Karla D	The Activation of Stereotypical Knowledge

#### Sociology

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Bowen, Derek M	Patterns of Skinhead Violence
Halter, Stephanie J	Law Enforcement's Reconceptualization of Juvenile Prostitutes from Delinquency Offenders to Child Sexual Abuse Victims in Six U.S. Cities

#### Zoology

Author	Dissertation Title
Bolanos, Diana M	Comparative Embryology and Muscle Development of Polyclad Flatworms (Platyhelminthes: Rhabditophora)
Quiroga, Sigmer Y	Systematics and Taxonomy of Polyclad Flatworms with a Special Emphasis on the Morphology of the Nervous System

#### Academic Year of Graduation: Fall 2006 to Summer 2007

#### Biochemistry

Author	Dissertation Title
Freamat, Mihael	Glycoprotein Hormone Receptors in Sea Lamprey ( <i>Petromyzon Marinus</i> ): Identification, Characterization and Implications for the Evolution of the Vertebrate Hypothalamic-Pituitary-Gonadal/Thyroid Axes
May, Carrie A	Valence and Structure Relationships in Oligonucleotides
Prien, Justin M	Uncovering Unique N-Linked Glycan Structural Isomers in Cancer Via MSn Disassembly
Yao, Gang	Analysis of the Role of Poly (A) Binding Protein (PAB1) in the mRNA Degradation Process in Yeast

#### Chemistry

Author	Dissertation Title
Athans, Andreas J	Fullerene-Acene Chemistry: Part I: Studies on the Regioselective Reduction of Acenes and Acene Quinones; Part II: Progress Toward the Synthesis of Large Acenes and Their Dielsalder Chemistry with [60] Fullerene

#### Computer Science

Author	Dissertation Title
Lapadula, Anthony J	GlySpy a Software Suite for Assigning Glycan Topologies from Sequential Mass Spectral Data



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### Earth&Environmental Sci

Author	Dissertation Title
Chen, Jianjun	Modeling Secondary Organic Aerosol Formation from Biogenic Hydrocarbons
Hagen, Stephen C	Linking Multivariate Observations of the Land Surface to Vegetation Properties and Ecosystem Processes
Palace, Michael W	Tropical Forest Structure: Ground Measurements of Course Necromass and Satellite Observations of Crown Geometry
Rawlins, Micheal A	Characterization of the Spatial and Temporal Variability in Pan-Arctic, Terrestrial Hydrology

#### Earth Science: Geology

Author	Dissertation Title
Kerwin, Charles M	Mapping, Petrological and Geochemical Explorations of the Massabesic Gneiss Complex in New Hampshire

#### Economics

Author	Dissertation Title
Cavusoglu, Nevin	Limiting Exchange Rate Swings Under A Managed Floating Regime: Evidence From A Panel of 24 Currencies
Soares, Ricardo B	Spatial Aspects of Infant Mortality and Informal Workers: the Case of Ceara State- Brazil

#### Education

Author	Dissertation Title
Cronin, Donna J	Interdisciplinary Middle School Teaming
Fensom, Gail A	Coming to Know Reflective Practice: An Ethnography of Novice University Teachers
Nelsen, Peter J	Critical Autonomy: Investigating Social Class and Education
Simpson, Julie F	More Than Simply "Hanging Out": The Nature of Participant Observation and Research Relationships

#### Engineering:Civil

Author	Dissertation Title
Choi, Minha	Soil Moisture Dynamics from Satellite Observations, Land Surface Modeling, and Field Data

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Cortez, Edel R	Moisture Effects on the Mechanical Behavior of Flexible Pavement Subgrades
Druschel, Stephen J	A Statistical Approach to Understanding Microcosm Methods for Microbially Mediated Dechlorination of Trichloroethene in Bedrock Aquifers

#### Engineering:Mechanical

Author	Dissertation Title
Grychanyuk, Vasyl M	Modeling of Diffusional Creep and Stress Relaxation in Copper Grains During Manufacturing of Microelectronic Integrated Circuits
Onyancha, Richard M	Analytical Model Development and Experimental Investigation of Process Model Size Effects in Microforming

#### Engineering:Systems Design

Author	Dissertation Title
Xu, Min	Smart Machining System Platform for CNC Milling with the Integration of a Power Sensor and Cutting Model

#### English

Author	Dissertation Title
Michaud, Michael J	IT Managers, Construction Marketers, and Emergency Medical Technicians: Professional Adult Learners in Higher Education
Ortmeier-Hooper, Christina M	Beyond "English Language Learner": Second Language Writers, Academic Literacy, and Issues of Identity in the U.S. High School
Smith, Laura A	Material Culture and Domestic Texts: Textiles in the Texts of Warner, Adams, Wilson, Sadlier, Stoddard, and Phelps
Tirabassi, Katherine E	Revisiting the "Current-Traditional Era": Innovations in Writing Instruction at the University of New Hampshire, 1940-1949

#### Genetics

Author	Dissertation Title
Prescott, Sarah G	Transposable Elements: What Have you Done for me Lately? A Genomics Based Investigation into the Potential Functional Roles of Transposable Elements using the Model Organism <i>Caenorhabditis Elegans</i>





## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Vining, Kelly J	Studies in Verticillium Wilt and Characterization of Candidate Verticillium Wilt Resistance Genes in the Mint Species <i>Mentha Longifolia</i> (L.) Huds.

#### History

Author	Dissertation Title
Guerrasio, Venetia M	Dissecting The Pennsylvania Anatomy Act: Laws, Bodies, and Science, 1880-1925
Leavenworth, Peter S	Accounting for Taste: The Early American Music Business and Secularization in Music Aesthetics, 1720-1825
Watterson, Rodney K	32 in '44: A Management and Environmental Study of Submarine Construction at Portsmouth Navy Yard During World War II

#### Mathematics

Author	Dissertation Title
Naidu, Deepak	Morita Equivalence for Group-Theoretical Categories

#### Mathematics Education

Author	Dissertation Title
Mitcheltree, Melissa K	Exploring Lesson Study as a Form of Professional Development for Enriching Teacher Knowledge and Classroom Practices
Titova, Anna S	Understanding Abstract Algebra Concepts

#### Nat Resrces & Envirn Stdy

Author	Dissertation Title
Barr, Garrett E	The Roles of Brook Trout and Larval Two-Lined Salamanders as Predators in Streams
Fleeger, William E	Standing Closest to the Flame Community Wildfire Planning and the Healthy Forest Act
Zhang, Difei	Sustainability of New Hampshire's Sawmill Industry and Its Forest Resource Base

#### Natural Resources

Author	Dissertation Title
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## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Gaeckle, Jeffrey L	Eelgrass ( <i>Zostera Marina L.</i> ) Leaf Growth and Restoration Ecology

#### Physics

Author	Dissertation Title
Dabaghyan, Mikayel	Measurement of Parity Violation in Thermal Neutron Capture on a Proton
Diaconescu, Cristian Bogdan	Self Assembly on Strained Metallic Interfaces and Novel Collective Excitations on Metal Surfaces
Filoti, Octavian F	Inclusive Scattering of Polarized Electrons from Polarized Protons in the Delta - Excitation Region With Blast
Liu, Yong	Ion Thermalization and Wave Excitation Downstream of Earth's Bow Shock: Theory and Observation
Li, Wenhui	Solar Wind Entry into the Magnetosphere Under Northward IMF Conditions
Muradyan, Iga K	Structural and Functional Pulmonary Imaging Using Hyperpolarized <sup>129</sup> XE
Vapirev, Alexander E	Ring Current- Atmosphere Interactions Model with Stormtime Magnetic Field

#### Plant Biology

Author	Dissertation Title
Beskenis, Joan L	Role of the Biofilm in Metals Accumulation by Fucoid Algae and Their Surrounding Rock Surfaces

#### Psychology

Author	Dissertation Title
Kroll-Cofrin, Ines	Parental Emotion Coaching: How Does it Relate to Attachment, Anger, Assertiveness, and Conflict Management?
Laythe, Brian R	Conflict and Threat Between Pre-Existing Groups: An Application of Identity to Bias, Persuasion and Belief Perseverance
Modecki, Kathryn L	Underlying Processes of Antisocial Decisions: Adolescents Versus Adults
Nelson, Holly	Encoding and Decoding Mutual Grooming: Communication with a Specialized Form of Touch
Rossi-Bastarache, Nicole E	"Coming Out" Stories of Gay and Lesbian Young Adults: Relation Between Memory Characteristics and Psychological Well-Being

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Surawski-Heerboth, Melissa K	Searching Under Stress: Anxiety and Selective Information Exposure

#### Zoology

Author	Dissertation Title
Blakeslee, April M	Resolving The 100 Year Debate Over The Ecological History of The Common Periwinkle Snail, <i>Littorina littorea</i> , In Northeast North America
Dijkstra, Jennifer A	Climate Change and Invasive Species Interact to Impact Succession and Diversity in Gulf of Maine Marine Fouling Communities
Freeman, Aaren S	The Maintenance, Evolution, and Impacts of Inducible Morphological Defenses in <i>Mytilus Edulis</i> : Responses to Multiple and Invasive Predators.
Griffen, Blaine D	Interactions Between Two Invasive Crab Predators, <i>Carcinus Maenas</i> And <i>Hemigrapsus Sanguineus</i> , and Consequences for the Native Community

#### Academic Year of Graduation: Fall 2005 to Summer 2006

##### Animal & Nutritional Sciences

Author	Dissertation Title
Milbury, Paul E	Cellular Uptake and Actions of Bilberry Anthocyanins in Retinal Pigment Epithelial Cells

##### Biochemistry

Author	Dissertation Title
Kroe, Rachel R	Applications of Fluorescence Detected Sedimentation I: Studying the Thermodynamic Impact of Valence in Non-Ideal Solutions II: High Affinity Interactions and Biological Media
Ohn, Takbum	Functional Analysis of the CAF1 Protein
Pentia, Dana C	Regulation of Rod Photoreceptor Phosphodiesterase (PDE6) by the Glutamic Acid-Rich Protein 2 (GARP2)
Silver, Matthew R	On the Neuroendocrine Regulation of Reproduction:

##### Chemistry

Author	Dissertation Title
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## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Aiken, Karelle S	The Tandem Chain Extension-Aldol Reaction of B-Keto Esters
Lin, Weimin	I. Peptide Isosteric Replacement Preparation Using Zinc-Mediated Chain Extension-Aldol Reactions II. Formal Synthesis of (+)- Brefeldin A III. Zinc- Mediated Chain Extension Reactions with Substituted Carbenoids
Shen, Xiaoxuan	Investigation of Cu(II) Complexes:I Cull Complexes of Trypt. and its Anas as Postcolumn Interaction Complexes for Indirect Fluo. Detection of Amino-Cont'ing Analytes.II High- Perf. Liq. Chromatographic Sep. of Cull Azamacrocyclic comp.

#### Earth&Environmental Sci

Author	Dissertation Title
Anderson, Jeanne E	Remote Detection of Forest Structure in the White Mountains of New Hampshire: An Integration of Waveform Lidar and Hyperspectral Remote Sensing Data
Frappier, Amy E	Recent Extreme Events in a Tropical Stalagmite: Multi-Proxy Records and Analysis of Ecosystems Value Sensitivity to Weak Climate Forcing
Zhou, Yong	Atmospheric Volatile Organic Compound Measurements: Distributions and Effects on Air Quality in Coastal Marine, Rural and Remote Continental Environments

#### Earth Science: Geology

Author	Dissertation Title
Khan, Intizar H	Paleoenvironmental and tectonic reconstruction of the lower Eocene Ghazij Formation and related units, Balochistan, Pakistan : Implication for India-Asia collision

#### Economics

Author	Dissertation Title
Kutinova Menclova, Andrea	The economics of childbearing : three essays
Li, Minghua	Family Structure, State Children's Health Insurance Program (Schip) and Child Outcomes
Linhares, Fabricio	Non-linear aspects of financial integration: an analysis of the real interest rate parity for Southeast Asian economies

#### Education

Author	Dissertation Title
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## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Hamer, Nancy J	Faculty Perceptions of the Effects of Collective Bargaining Agreements on their Professional Roles: The New England Public Higher Education Experience
Harper, Laurie J	Transition Voices: Perspectives, Concerns, and Discontinuities Expressed by Children, Parents, and Teachers as Children Transition from a University-Affiliated Kindergarden to a Public School First Grade
Miller, Pamela A	Mentoring in the Learning Community: Problematic Practices and Outcomes of Initial Implementation of Formal Mentoring Programs in Two New Hampshire Public School Districts
Seaman, Jayson O	Adventure Education as Cultural-Historical Activity: A Study of Experience, Learning and Social Processes in Project Adventure Workshops

#### Engineering:Chemical

Author	Dissertation Title
Wu, Fan	Nonlinear Dynamics of Blood Flow in Simple Microvascular Networks

#### Engineering:Civil

Author	Dissertation Title
Li, Xinghe	Mitigating Alkali Silica Reactions in Recycled Concrete
Watts, Alison W	Uptake and Growth Effects of Polycyclic Aromatic Hydrocarbons in Wetland Plants

#### Engineering:Electrical

Author	Dissertation Title
Smith, Wayne J	Sensing the Human Alpha Rhythm Using a Non-Contact Electroencephalographic (EEG) Electrode

#### Engineering:Mat Science

Author	Dissertation Title
Yao, Shaoning	An experimental and analytical study on the measurement of dielectric constant degradation in plasma-processed methyl silsesquioxane using electrostatic force microscopy

#### English

Author	Dissertation Title
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## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Anderson, Joyce R	Indians and Immigrants: Survivance Stories of Literacies
Botelho, Keith M	Rumor, gender, and authority in English Renaissance drama (Christopher Marlowe, William Shakespeare, Ben Jonson)
Cox, Michelle C	When the workplace is on campus : learning to write for a university speech language clinic
Lopezina, Andrew J	Red ink : Native Americans picking up the pen in the colonial period

#### Genetics

Author	Dissertation Title
Silvescu, Cristina I	Structural analysis of cytokine signaling modulators

#### History

Author	Dissertation Title
Averill, Stephanie L	Forging the West in words and iron : the US, West German rearmament, and the language of Atlantic community, 1948-1955
Fortin, Jeffrey A	Little Short os National Murder: Forced Migration and the Making of Diasporas in the Atlantic World, 1745- 1865
Lynch, Theresa C	Attica : "A monstrous credibility gap"

#### Literacy&Schooling

Author	Dissertation Title
Kohn, Charlene G	Documentation Panels: Evidence of Scientific Literacy in a Primary Multiage Classroom -Teaching at the Edge of Magic-

#### Mathematics

Author	Dissertation Title
Ghosh, Shamindra K	Planar Algebras: A Category Theoretic Point of View
Hupper, Veronica P	Contributions to Modeling and Computer Efficient Estimation for Gaussian Space-Time Processes
Zarringhalam, Kourosh	Cupolets: Chaotic Unstable Periodic Orbits Theory and Applications

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### Mathematics Education

Author	Dissertation Title
Gray, David M	An Investigation of Pre-service Teachers' and Professional Mathematicians' Perceptions of Mathematical Proof at the Secondary School Level
Montiel, Mariana	The Proces of Integration and the Concept of Integral: How Does Success with Applications and Comprehension of Underlying Notions Such as Accumulation Relate to Students' Mathematical Fluency

#### Microbiology

Author	Dissertation Title
Michaels, Brandye A	Genetics and physiology of motility by Photorhabdus SPP.

#### Nat Resrces & Envirn Stdy

Author	Dissertation Title
Frappier, Brian R	Ecological Patterns, Community Classification, and a Comparison of Approached for Predicting Biological and Habitat Reference Conditions in New Hampshire Streams
Howland, David A	Good press, bad press : a 25-year comparison of arguments and trends in American news coverage of climate change and the ozone hole
liames, John S	Assessing the accuracy of the MODIS LAI 1-KM product in southeastern United States loblolly pine plantations : accounting for measurement variance from ground to satellite
Lafiandra, Emily M	Gonadal histology and reproductive steroidogenesis of anurans exposed to potential endocrine disrupting contaminants
Zhang, Qingyuan	Improving Estimation of Gross Primary Productivity of Terrestrial Ecosystems

#### Natural Resources

Author	Dissertation Title
Morrow, Penelope S	Toward eco-citizenship : a praxis for empowerment

#### Physics

Author	Dissertation Title
Donmez, Burcin	Charactization of Single-Sided CdZnTe Strip Detectors for High Energy Astrophysics Applications

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Karpus, Peter J	Vector Polarization Observables of the Deuteron and a New Measurement of the Magnetic Dipole Form Factor GM
Kirkpatrick, John M	Measurement of the partial cross sections $\sigma_{TT}$ , $\sigma_{LT}$ and $\sigma_{T+\epsilon}\sigma_L$ of the $p(e,e'\pi^+)n$ reaction at the $\Delta(1232)$ resonance
Reeves, Katharine K	Linking solar flare radiation to the dynamics of coronal mass ejections
Sindile, Adrian T	Proton form factor ratio measurement with BLAST

#### Plant Biology

Author	Dissertation Title
Bray, Troy L	A Molecular and Morphological Investigation of the Red Seaweed Genus <i>Porphyra</i> (Bangiales, Rhodophyta) in the Northwest Atlantic

#### Psychology

Author	Dissertation Title
Barnes, Christopher A	The Effect of Memory for Serially Presented Causal Information on Judgements of Contingency
Christianson, John P	Serotonergic involvement in the behavioral depression produced by intermittent swim stress
Cofrin, Michael P	Psychopathological symptoms and their relation to paranormal belief and illusory judgment
Jenkin, Clinton M	Responses to Terrorism Scenarios: Event Features, Individual Characteristics, and Subjective Evaluations
Root, Michael J	Boundary-Work in United States Psychology: A Study of Three Interdisciplinary Programs

#### Sociology

Author	Dissertation Title
Stracuzzi, Nena F	Parenting in the Age of Prozac: Parental Decision-Making in Social Context

#### Zoology

Author	Dissertation Title
Kidd, Michael R	Patterns and Process During the Diversification of the Cichlid Fishes in Lake Malawi, Africa



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Panaitof, Stefania C	Physiological bases of parental care in the burying beetles, <i>Nicrophorus orbicollis</i>
Spady, Tyrone C	Cichlids as a Model for the Evolution of Visual Sensitivity

#### Academic Year of Graduation: Fall 2004 to Summer 2005

##### Animal & Nutritional Sciences

Author	Dissertation Title
Ordway, Ryan S	An Evaluation of Supplemental Methionine Sources for Lactating Dairy Cows

##### Biochemistry

Author	Dissertation Title
Wallace, Aaron L	The Taxonomic and Systematic Relationships of Several Salt Marsh Fucus Taxa (Heterokontophyta, Phaeophyceae) within the Gulf of Maine and Ireland Examined Using Microsatellite Markers

##### Chemistry

Author	Dissertation Title
Lewis, Susanne M	Mechanistic Studies in Carbene and Polyurethane Chemistry
Mwangi, George K	Chemical Sensors Based on Swelling Polymer Microspheres and Uncrosslinked Fluorescently-Labelled Molecularly Imprinted Polymers
Yin, Yan	Characterization of the Major Extrapallial Fluid Protein of the Mollusc, <i>Mytilus Edulis</i> : Implications for Function

##### Computer Science

Author	Dissertation Title
Lawton, James H	Multi-Agent Opportunism

##### Earth&Environmental Sci

Author	Dissertation Title
Yalcin, Kaplan B	Glaciochemical Records from the St. Elias Mountains, Yukon, Canada



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### Earth Science: Oceanography

Author	Dissertation Title
Cutter, George R	Seafloor Habitat Characterization, Classification, and Maps for the Lower Piscataqua River Estuary
Son, Seung-hyun	Inter-Annual and Decadal Variation in the Pelagic Marine Ecosystem of the Yellow and East China Seas
Vandemark, Douglas C	On the Role of High Frequency waves in Ocean Altimetry

#### Earth Sciences

Author	Dissertation Title
Sturgeon, Gordon M	Chemical Heterogeneity of GlacioFluvial Deposits: Outcrop Study and Implications for Reactive Transport
Wollheim, Wilfred M	The Controls of Watershed Nutrient Export

#### Economics

Author	Dissertation Title
Tebaldi, Edinaldo	Innovation and Institutions: Examining the Black Box

#### Education

Author	Dissertation Title
Bell, Brent J	College Students' Development of Social Support and its Relationship to Pre-Orientation Experiences
Cox-Buteau, Betsey S	School Governance in New Hampshire: Revisiting a Study of School Board - Superintendent Relations in Small Rural School Districts
Henning, Gavin W	Predictors of Parental Notification Policies for Alcohol- Related Violations at Colleges and Universities
Jette, Michael R	Exploring Table Talk: Does Dialogue or Debate Correspond to Success and Satisfaction in Teacher Collective Bargaining?
Liggett, Tonda A	Visualizing the Invisible: The Role of Race and White Racial Identity in the Teaching and Pedagogy of New ESOL Teachers
Pelletier, Jayne E	Bridging the Gap between Asynchronous and Traditional Learning Environments: Technology for Adult Learners
Pobywajlo, Margaret F	The Role-Taking Experience of Undergraduate Peer Tutors: A Cognitive-Developmental Approach

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Ritter, Martha J	Can I Get a Witness? the Significance of Finding a Witness for Liberatory Education

#### Engineering:Chemical

Author	Dissertation Title
Zhang, Zhong Q	Nucleation and Growth Kinetics of Tin and Tin-Silver Alloy During Initial Stages of Electrodeposition

#### Engineering:Electrical

Author	Dissertation Title
Zhang, Chunshu	Pole-Mounted Sonar Vibration Prediction Using Cmac Neural Networks

#### Engineering:Mat Science

Author	Dissertation Title
Stubbs, Jeffrey M	Polymer Chain Mobility and its Influence on the Development of Latex Particle Morphology

#### English

Author	Dissertation Title
Harkness, Andrea L.	"Invidiam Viam Aut Faciam"- "I will find a way or make one": The Poetic Practice of Political Counsel in the Courts of Elizabeth I and James I
Hinnov, Emily M	Choran Community: The Aesthetics of Encounter in Literary and Photographic Modernism

#### Genetics

Author	Dissertation Title
Hill, Robert S	Genetic Diversity and Structure of Calanoid Copepods: Molecular Evolutionary Patterns in Coastal Estuaries ( <i>Acartia Tonsa</i> ) and the Open Ocean ( <i>Calanus SPP.</i> )
Lee, Bo-Young	Approach to the Identification of Sex-Determining Genes in the Tilapia Genome by Genetic Mapping and Comparative Positional Cloning
Whipple, Chery A	Function, Expression and Evolution of the SRC Family Kinases in <i>Caenorhabditis Elegans</i>

#### History

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Brinck-Johnsen, Kim	Playing the Man: Masculinity, Performance, and US Foreign Policy, 1901-1920
Frystak, Shannon L	"Woke up this Morning with my Mind on Freedom": Women and the Struggle for Black Equality in Louisiana

#### Mathematics

Author	Dissertation Title
Bannon, Jon P	Burnside Factors, Amenability Defects and Transitive Families of Projections in Factors of Typee II1
Yousefi, Hassan	Stable Invariant Subspaces, Reflexivity, and BMO
Zak, Sandra E	Nonunital Multiplier Pairs and Remarks on Generalized Group C*-algebras

#### Mathematics Education

Author	Dissertation Title
Alghanem, Maher M	Evaluating the Middle School Mathematics Teacher Preparation Program at Riyadh Teachers' College
Berk, Dawn M	The Interplay Between Instructional Policy and Its Constituents: How Mathematics Teachers Interact With and Understand Principles and Standards for School Mathematics

#### Nat Resrces & Envirn Stdy

Author	Dissertation Title
Bhatt, Maya P	Evolution of Chemical Composition Along River Drainage Networks
Bowley, Evilene L	Wood and Soil-Atmosphere CO2 Fluxes from a Tropical Forest Ecosystem
Miaoulis, Nancy J	The Ecological Christ: Discerning and Ecological Consciousness in the Sermon on the Mount

#### Natural Resources

Author	Dissertation Title
Brennan, Mark W	Spatial Distribution of the Common Loon (Gavia Immer) in New Hampshire
York, Katharine P	The Nature of Dissection: Exploring Student Conceptions

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### Physics

Author	Dissertation Title
MacDonald, Elizabeth A	Sounding Rocket Measurements of Thermal Electrons in Active Nightside Aurora
Ruset, Iulian C	Hyperpolarized <sup>129</sup> Xe Production and Applications
Saul, Lukas A	Interstellar Helium Pickup ION Flux Variations Observed with SOHO/CELIAS
Zheng, Qihua	On the Rayleigh-Brillouin Scattering in Air

#### Psychology

Author	Dissertation Title
Harmon-Vukic, Mary E	Factors Affecting the Activation of Predictive Inferences
Pepin, Elise C	Ecological Influences on the Developmental Status of Parents of Adolescents
Pringle, Zorana I	Creativity or Creativities: A Study of Domain Generality and Specificity
Skowronek, Jeffrey S	Long-Term Episodic Memory in Children with Attention-Deficit/Hyperactivity Disorder

#### Reading & Writing Instruction

Author	Dissertation Title
Boothroyd, Kimberly A	Third Graders Speak: Experiences and Perspectives of Reading and Writing in Urban Public Schools

#### Sociology

Author	Dissertation Title
Harrison, Jill H	Does Religion Matter? A Test of Classical Theories of Deviance on Two Different Religious Types
Howerton, Amanda	Gender Differences in Coping: Implications for Depression and Crime
Moran, Catherine L	Needling Doubts: A Sociological Examination of Parental Resistance to Childhood Immunization
Snowadzky, Barbara M	Coming Together or Going it Alone: How Resource-Dependent Communities Survive in Newfoundland and Labrador

#### Zoology

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Bradt, Gabriela M	Development of Muscle Structure and Function in Loliginid Squids
Cooke, Suzanne M	The Effect of Temperature on the Physiology and Locomotory Behavior of the American Lobster, Homarus Americanus

#### Academic Year of Graduation: Fall 2003 to Summer 2004

##### Biochemistry

Author	Dissertation Title
Gokarn, Yatin R	Hydrodynamic Behavior and Thermal Stability of a Pegylated Protein: Studies with Hen Egg Lysozyme
Qu, Xiang	Analysis of Signal Output by the Ethylene Receptor Etr1 From Arabidopsis

##### Chemistry

Author	Dissertation Title
Fan, Wenzhe	Chemical Sensors Based on Swellable Molecularly Imprinted Polymer Microspheres in a Hydrogel
Mabry, John	Thermal Rearrangement of Linear Carbon Chains: Theoretical and Experimental Studies
Peng, Yijie	Syntheses of Mono- and Diamide Cross-Bridged Cyclics and Syntheses of Bifunctional Chelators Based Upon Cross-Bridged Tetraamine Macrocycles

##### Computer Science

Author	Dissertation Title
Plumlee, Matthew D	Linking Focus and Context in 3D Multiscale Environments
Rhodes, Philip J	Granite: A Scientific Database Model and Implementation

##### Earth&Environmental Sci

Author	Dissertation Title
Cardoso, Manoel F	Fire Dynamics in Amazonia
Pontius, Jennifer A	Assessing Hemlock Woolly Adelgid Induced Decline and Susceptibility using Hyperspectral Technologies



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### Earth Science: Geology

Author	Dissertation Title
Escamilla-Casas, Jose C	Bedrock Geology of the Seacoast Region of New Hampshire, USA

#### Earth Science: Oceanography

Author	Dissertation Title
Feng, Hui	Ocean Color Modeling: Parameterization and Interpretation

#### Earth Sciences

Author	Dissertation Title
Bjerklie, David M	Development of Hydraulic Relationships for Estimating In-Bank River Discharge Using Remotely Sensed Data
Miller, Samuel T.K.	The Central New England Sea Breeze Study

#### Education

Author	Dissertation Title
Einsiedler, Linda	Asian American Perspectives on College Student Experience: An Interpretive Narrative
Grenier, Michelle A	Inclusion in Physical Education for Students with Severe Disabilities
Runge, M Christine	Perceptions of Eighth Grade Mathematics Teachers of the Prospect of the Maine Educational Assessment on Instructional Practices
Singer, Mary D	Shifting Worlds: Leading Educational Change in a Quantum Universe

#### Engineering:Chemical

Author	Dissertation Title
Wu, Aiwon	In-Situ Study of the Influence of Additives on the Growth Behavior of Copper Electrodeposits on Copper Single Crystal

#### Engineering:Civil

Author	Dissertation Title
Apul, Defne S	Contribution to Prediction Contaminant Leaching from Secondary Materials Used in Roads



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Pulido, Gonzalo	Some Contributions to the Hydraulic Characterization of Fractured Bedrock Formations

#### Engineering:Electrical

Author	Dissertation Title
Canfield, John C	Active Disturbance Cancellation in Nonlinear Dynamical Systems Using Neutral Networks
Kirk, Brian P	A Wavelet Based CMAC for Enhanced Multidimensional Learning

#### Engineering:Mat Science

Author	Dissertation Title
Li, Zhengmao	Study of the Enhancement Effect of Cyclopentadecanolide on Protein Permeation through Lipid Membranes

#### Engineering:Mechanical

Author	Dissertation Title
Endrino, Jose L	The Impact of Coating Architecture on the Hardness, Friction and Wear Resistance of Hard and Tribological Nanocomposite Coatings
Novak, Jindrich	Effective Elastic Properties of Two-Dimensional Solids with Inhomogeneities of Irregular Shapes
Osman, Kahar B	Multiple Steady Solutions and Bifurcations in the Symmetric Driven Cavity

#### English

Author	Dissertation Title
Zenger, Amy A	Writing American Subjects: Race, Composition, and the Daily Themes Assignment for English 12 at Harvard, 1889-87

#### History

Author	Dissertation Title
Mazzari, Louis W.	Arthur Raper: Modern Realist in the New Deal South
Rine, Holly A	Intercultural Contact and the Creation of Albany's New Diplomatic Landscape, 1647-1680

#### Mathematics



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Gao, Mingchu	Free Products of Operator Spaces and Free Markov Processes
Waldhauser, Tamas	Spectral Interpretation of Zeros of Zeta Functions

#### Microbiology

Author	Dissertation Title
Bean, Christine K	Assessment of the Fate of Cryptosporidium Parvum, Giardia Lamblia and Ascaris Lumbricoides in Class A Composting and CLASS B Lime Stabilization Biosolids Treatment Processes
Naser, Walid M	Charcterization of Prokaryotic Diversity in a Chlorinated Solvent-Contaminated Bedrock Aquifer Using Denaturing Gradient Gel Electrophoresis, Ribosomal DNA Sequencing and Real Time PCR

#### Nat Resrces & Envirn Stdy

Author	Dissertation Title
Bautista, Gabriel F	Intimact with the Natural World A Humanistic Perspective
Brushett, Lynda A	Examining the Role of Social Capital in Community Development: How the Creation of a Land Trust Set a Small Town on the Path to Sustainability
Newman, Julie	Reaching Beyond Compliance: Obstacles to Integrating Sustainability into Decision-Making Processes in an Institution of Higher Education
Pellerin, Brian A	The Influence of Urbanization on Runoff Generation and Stream Chemistry in Massachusetts Watersheds

#### Physics

Author	Dissertation Title
Brennison, Edward S	Wavelet Analysis of ULF Magnetosphere Waves
Gavalian, Gagik	Beam Spin Asymmetry measurements in Deeply Virtual Compton Scattering

#### Plant Biology

Author	Dissertation Title
Howard, Lauren F	Factors Affecting Plant Community Composition and Dynamics in the Ossipee Pine Barrens, New Hampshire



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Philbrick, Paula Busse	Factors Restricting Recruitment of <i>Ascophyllum Nodosum</i> L. (Le Jolis)
Teasdale, Brian W	An Investigation of Genetic Variation Within Northwest Atlantic <i>Porphyra</i> (Bangiales, Rhodophyta) with Specific Phylogeographic Analysis of the Common, Rocky Intertidal Species, <i>Porphyra umbilicalis</i>
Thompson, Therese A	A Study of Basidiomycetes Isolated from Coarse Woody Debris and Contiguous Soil Horizons in a Mixed Deciduous-Conifer Forest in New Hampshire, USA.

#### Psychology

Author	Dissertation Title
Bailey, Kathleen R	The Role of Frontal Cortical - Basal Ganglia Circuits in Simple and Sequential Visuomotor Learning
Filley, Eugene T	The Venetian Blind Effect: Contrast Disparity Modulation in Irradiation Stereoscopy
Gagne, Danielle D	Self-Efficacy and Allocation of Effort During Reading Among Older and Younger Adults
Kosits, Russell D	A Loss of Will: "Arminianism", Nonsectarianism and the Erosion of American Psychology's Moral Project, 1636-1890
Mulvaney, Matthew K	Corporal Punishment as a Determinant of Developmental Outcomes: Longitudinal and Process Models
Peracchi, Kelly A	The Advantage for Name-Designated Characters During Reading
Perkins, Donna M	Effect of Parenting, Emotional Intelligence, Hostile Attributional Bias, and Peer Status on Problem Behavior
Van De Water, Thomas J	Mental Accounting Psychology and Life Cycle Economics Who Saves, Who Doesn't and How To Tell the Difference
Wenzel, Adam J	Impact of Macular Pigment Optical Density on Photophobia Threshold

#### Reading & Writing Instruction

Author	Dissertation Title
Moher, Terry A	Teaching Not Knowing: Reflections on a Writing Practice

#### Sociology

Author	Dissertation Title
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## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Field, Carolyn J	Interracial Dating Among College Students: Cultural Norms and Partner Violence
Lord, Susan A	Wealth and Social Responsibility a Study of Philanthropy in Southern New Hampshire and Southern Maine
Muller, Paul A	The Relative Impact of Childhood Stressor Domains on Young Adult Depression and the Mediating Role of Social and Personal Resources
Wells, Melissa	Law Enforcement Dilemmas in the Investigation of Internet Sex Crimes against Minors

### Academic Year of Graduation: Fall 2002 to Summer 2003

#### Biochemistry

Author	Dissertation Title
Cui, Yajun	Transcriptional Elongation Defects Enhance Upstream Poly (A) Site Utilization and SPT5 Affects mRNA Degradation through its Physical and Functional Interaction with CCR4-Not Complex
Durant, Jennifer A	Free Solution Electrophoresis Measurements and their Theoretical Relationships to Net Protein Valence
Germano-Presby, Joselle	Nuclear and Cytoplasmic Genetic Variation in Picea: DNA Markers for Evaluating Past Migration, Introgression and Evolutionary History

#### Chemistry

Author	Dissertation Title
Kaval, Necati	Improved Swellable Polymer Microspheres for Chemical Sensing
Niu, Weijun	Synthetic, Structural, and Stability Studies of Metal Complexes of Cross-Bridged Tetraamine Macrocycles
Puk, Richard	Simultaneous Determination of Nitrous Oxide and Ammonia for Measurement of In-Situ Fluxes from Natural Ecosystems by Gas Chromatography with Headspace Autosampler and Electron Capture Detection

#### Computer Science

Author	Dissertation Title
Sabin, Mihaela C	Towards More Efficient Solution of Conditional Constraint Satisfaction Problems

#### Earth&Environmental Sci



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Konisky, Raymond A	Spatial Modeling and Visualization of Habitat Response to Hydrologic Restoration in New England Salt Marshes

#### Earth Sciences

Author	Dissertation Title
Slater, John F	Characterization of the Physical, Chemical, and Optical Properties of an Atmospheric Aerosol Particles in New Hampshire

#### Economics

Author	Dissertation Title
Ford, Timothy C	Essays on Foreign Direct Investment and Growth in the United States

#### Education

Author	Dissertation Title
Hallock, Patrice W	One Step Forward, Two Steps Back: Making Change in Early Head Start
Harris, Michael R	Efforts to Equalize Funding between Wealthy and Poor School Districts in Maine, New Hampshire and Vermont
Minard, Maryann J	Elementary Accreditation: Pro Forma or Substance? A View from Inside the Schoolhouse Gates
Sheaff, Althea E	Connections between New Hampshire Superintendents' Leadership Orientations and their Perceptions of Selected Issues Associated with Politics in Education
Wolf, Karen H	Knowledge, Inquiry, Action: Teacher Collaboration at Prospect Center's Summer Institute
Zurawel, Rosemary A	Committed to Encounter: Sources of Teacher Engagement with Students in a Cross-Cultural Study of Two Sister Schools in Japan and the United States

#### EES:Oceanography

Author	Dissertation Title
Salisbury, Joseph E	Satellite Indices of Fluvial Influence in Coastal Waters

#### Engineering:Chemical

Author	Dissertation Title
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## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Chen, Zongyuan	Nitric Oxide Reduction by Non-Thermal Plasma and Catalysis

#### Engineering:Civil

Author	Dissertation Title
Roldan Garcia, Fabio Augusto	Oxygen and Nitrate Enhanced in situ Bioremediation of an Oil-Contaminated Salt Marsh

#### Engineering:Systems Design

Author	Dissertation Title
Farrell, Robert S	Design and In Situ Testing of a Piezometer System to Measure Earthquake-Induced Pore-Pressure Changes

#### English

Author	Dissertation Title
Fulwiler, Megan	Reading the Person: Toward a Theory and Practice of Self Narrative in Student Writing
Herschbach, Robert	Gothic Economies: Global Capitalism and the Boundaries of Identity
Walters, Richard L	Performing Texts; Playing with Jazz Aesthetics

#### Genetics

Author	Dissertation Title
Curole, Jason P	Evolution of Gender Associated Mitochondrial DNA in Bivalves
Medarova, Zdravka O	The Effects of Erythrocyte Alloantigen L on the Avian Immune System Response

#### History

Author	Dissertation Title
Austin, Mike L	Carving Out a Sense of Place: The Making of the Marble Valley and the Marble City of Vermont
Beagle, Jonathan M	"The Cradle of Liberty": Faneuil Hall and the Political Culture of Eighteenth-Century Boston
Clifford Larson, Katherine	Asanti Daughter of Zion: The Life and Memory of Harriet Tubman

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Griffin, Albert J	Intelligence Versus Impulse: William H. Seward and the Threat of War with France over Mexico, 1861-1867
McKenzie, Matthew G	Vocational Science and the Politics of Independence: The Boston Marine Society, 1754-1812
Silos-Rooney, Jill K	"Everybody Get Together": The Sixties Counterculture and Public Space, 1964-1967

#### Mathematics Education

Author	Dissertation Title
Grundmeier, Todd A	The Effects of Providing Mathematical Problem Solving Posing Experiences for K-8 Pre-Service Teachers: Investigating Teachers' Beliefs and Characteristics of Posed Problems

#### Microbiology

Author	Dissertation Title
Brabants, Jacqueline J	Evaluation of Bacteriophage and Viral Persistence during Alkaline Stabilization in Sludge and Biosolids Intended for Land Application

#### Nat Resrces & Envirn Stdy

Author	Dissertation Title
Salazar, Melinda	A Gender and Development (GAD) Implementation Evaluation: Testimonios Reveal the Successes, Challenges, and Unpredicted Results for Women's Equality and Community Sustainability

#### Physics

Author	Dissertation Title
Deng, Rongping	Thermoionization and Dissociation of Fullerenes and Endohedral Fullerenes
Gordon, Bruce E	Resonant Wave-Ion Interactions in the Heliosphere: I. Interplanetary Traveling Shocks II. Ion Heating and Acceleration in the Extended Corona
Kaghashvili, Edisher K	Mode Conversion and Wave-Particle Interaction Processes in the Solar Wind
Protopopescu, Dan	A Survey of Beam Asymmetries in Semi-Exclusive Electron Scattering on the 4 HE and 12 C

#### Plant Biology



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Adams, Leslie M	A Comparison of Floristic Diversity in Old-Growth Versus Mid-Successional Secondary-Growth Hardwood Forests of the White Mountain National Forest, New Hampshire, USA
Gengarely, Lara M	Factors Associated with Atlantic White-Cedar Seedling Recruitment on Microtopographic and Landscape Scales, Brown Mill Pond, Rye, New Hampshire
Lu, Sheen X	Calcium-Dependent Protein Kinases are Myristoylated and Associated with Different Membranes in Arabidopsis Thaliana

#### Psychology

Author	Dissertation Title
Brackett, Marc A	Conceptualizing and Measuring the Life Space and Its Relation to Openness to Experience
Feenstra, Jennifer S	Supporting and Being Supported: Receiving and Providing Social Support in Mothers of Young Children
Martin, Tracey A	Power and Consent: Relation to Self-Reported Sexual Assault and Acquaintance Rape
Smiler, Andrew P	Living the Stereotype: Connections between Male Behavior and Male Images
Stringham, James M	Spatial Properties of Photophobia

#### Reading & Writing Instruction

Author	Dissertation Title
Israel, Constance M.	Introducing Performance into the Communication Curriculum for Engineers: Breaking the Mould
Smith, Amy F	Third Grade Evaluators Thrive as Readers

#### Zoology

Author	Dissertation Title
Albertson, R Craig	Genetic Basis of Adaptive Radiation in East African Cichlids
Foradori, Matthew J	Investigations into the Digestive System Proteases of Argiope aurantia (Araneae: araneidae), Hemolytic Agents of Spider Venoms, and the Role of Both in Necrotic Arachnidism
Sisson, Chad G	Life History Dynamics of Nudibranch Sibling Species in the Genus Dedronotus in the Gulf of Maine

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Sulikowski, James A	Age, Growth, and Reproductive Biology, of the Winter Skate, <i>Leucoraja ocellata</i> , in the Western Gulf of Maine
Tyrrell, Megan C	Impacts of the Introduced Crabs, <i>Carcinus maenas</i> and <i>Hemigrapsus sanguineus</i> , in Northern New England

### Academic Year of Graduation: Fall 2001 to Summer 2002

#### Animal & Nutritional Sciences

Author	Dissertation Title
Burke, Joanne D	Investigating Determinants of Macular Pigment Optical Density and Macular Pigment Distribution in Adults aged 45-73: Can Enhanced Analytical Techniques Improve the Ability to Predict Macular Pigment Status?
Zhang, Bo	Expression, Activation, and Regulation of Matrix Metalloproteinase 2 (MMP-2) in the Bovine Corpus Luteum

#### Biochemistry

Author	Dissertation Title
Mou, Hongmei	Regulation of Mammalian Photoreceptor Phosphodiesterase (PDE) by Its Noncatalytic GAF Domains and Its Two Small Subunits, Gamma and Delta
Norton, Angela W	Mechanism of Activation of Photoreceptor Phosphodiesterase by Transducin and by Low Molecular Weight Proteins
Zhao, Xue-Chu	Regulation of Ethylene Receptor Expression in Arabidopsis

#### Chemistry

Author	Dissertation Title
Liu, Huqun	Magnetoacoustic Chemical Sensors Based on Swellable Polymer Microspheres
Ronsheim, Matthew D	A Facile Conversion of Beta-Keto Carbonyl Compoundres to Alpha, Beta-Unsaturated-Gamma-Oxo Carbonyl Systems and A Study of Ketal-Derived Oxonium Ylides
Tetreau, Mark C	Diels-Alder Reactions of [60] Fullerene with 1,2,4,5-Tetrazines and Additions to [60] Fullerene-Tetrazine Monoadducts
Theberge, Cory R	Ketomethylene Isosteric Amide Bond Replacements via the Zinc-Mediated Chain Extension of N-Protected Amino Acids
White, Ronald P	Thermodynamic Properties of Mixed Lennard-Jones Atomic Clusters





## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### Earth Sciences

Author	Dissertation Title
Bray, Alison M	The Geochemistry of Boron and Lithium in Mid-Ocean Ridge Hydrothermal Vent Fluids
Hewitt, Antony T	Seafloor Geology, Deglacial History, and Early Post-Glacial Evolution of Eastern Juan de Fuca Strait
Loomis, Matthew B	Physical & Chemical Characterization of Single Atmospheric Aerosols: Laboratory Studies of Interactions of Acidic Trace Gases with Sea-Salt Aerosols & Development Efforts for an Aerosol Charging System Using a Corona Discharge

#### Economics

Author	Dissertation Title
Oktem, Mustafa	Property Tax Shifting under Imperfect Competition: Theory and Application
Vieira, Flavio V	A Unified Approach to Testing for Mean Reversion of Exchange Rates and Prices: The OECD and Latin American Cases

#### Education

Author	Dissertation Title
Jameson, Deborah R	Self-Determination and Success Outcomes of Two-Year College Students with Disabilities: An Integration of Quantitative and Qualitative Approaches
Kelley, Steven T	The Manifestation of Leadership in Three High-Flying New Hampshire Elementary Schools
Schuh, Maryclare	Individuals with Disabilities as Parents and their Earliest Connections to Systems of Support
Worster, Anneliese M	Sense of Place among New England Farmers and Commercial Fishermen: How Social Context Shapes Identity and Environmentally Responsible Behavior

#### Engineering:Civil

Author	Dissertation Title
Roseen, Robert M	Quantifying Groundwater Discharge Using Thermal Imagery and Conventional Groundwater Exploration Techniques for Estimating the Nitrogen Loading to a Meso-Scale Inland Estuary

#### Engineering:Electrical

Author	Dissertation Title
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## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Strohschein, David A	Application of Characteristic Mode Analysis to Variable Antenna Placement on Devices Operating in the Near-Resonant Range

#### Engineering:Mechanical

Author	Dissertation Title
Mohd.Ghazali, Normah	Numerical Simulation of Acoustic Waves in a Rectangular Chamber

#### Engineering:Ocean

Author	Dissertation Title
Fonseca, Luciano E	A Model for Backscattering Angular Response of Gassy Sediments: Applications to Petroleum Exploration and Development Programs

#### Engineering:Systems Design

Author	Dissertation Title
Barr, Lawrence C	Testing for the Significance of Induced Highway Travel Demand in Metropolitan Areas
Hunold, Kriss Q	Human-Machine System Design Optimization for Non-Deterministic Spacecraft Anomaly Determination/Resolution
Sqalli Houssaini, Mohammed	Diagnosing Interoperability Problems and Debugging Models by Enhancing Constraint Satisfaction with Case-Based Reasoning

#### English

Author	Dissertation Title
Andersen, Elizabeth J	Excavating the Remains of Empire: War and Postimperial Trauma in the Twentieth Century Novel
Doyle, Mary L	Faith Positions: Re-Reading Gender, Race and Christianity in Nineteenth-Century American Women's Writing

#### History

Author	Dissertation Title
Jarvis, Kimberly A	Nature and Identity in the Creation of Franconia Notch: Conservation, Tourism, and Women's Clubs
Pistalo, Vladimir B	Juggling with Three Identities: Ideology of Yugoslavian among the American Serbs 1900-1993
Richards, Susan L	Gendered Work: Women's Paid Labor in Barre, Vermont and Trinidad, Colorado, 1880-1918

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### Mathematics Education

Author	Dissertation Title
Findell, Bradford R	Learning and Understanding in Abstract Algebra

#### Microbiology

Author	Dissertation Title
Hara-Kaonga, Bochiwe H	OMPD but not OMPC is Involved in Adherence of Salmonella enterica Serovar Typhimurium to Human Cells

#### Natural Resources

Author	Dissertation Title
Bryant, David M	Community and Ecosystem Analysis of Forests Recovering from Landslide Disturbance White Mountain National Forest, NH.
Burnett, James S	Assessing the Ice Storm Damage to Hardwood Forest Canopies Using the Advanced Solid-State Array Spectroradiometer (ASAS) and Landsat TM Imagery
Ellis, Benjamin H	Estimating the Environmental Costs of the Hydro Fuel Cycle using Life Cycle Assessment Techniques and Economic Valuation

#### Plant Biology

Author	Dissertation Title
Bhatnagar, Pratiksha	Transgenic Manipulation of Polyamine Metabolism in Poplar
Deng, Chaoyang	The Relationship between Fruit Color Traits and Anthocyanin Genes in Diploid Fragaria
Grossman-White, Andrea	Photoprotective Role of Beta-Carotene and Antioxidant Enzymes: A Shield Against Ultraviolet Damage in Dunaliella Bardawil

#### Psychology

Author	Dissertation Title
Bell, Kenneth E	The Effects of Reader Generated and Previously Existing Text Marking on Comprehension in Readers of Different Skill Levels
Laplant, Lindsey E	Implementation and Evaluation of Group-Based Prevention of Eating Concerns Using Self-Efficacy and Knowledge Enhancement

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Milinder, Le'Ann L	A Test of the Ideal Free Distribution in Panhandling Humans
Wentworth, Phyllis A	Child Welfare Reformers, Academic Psychologists, and the Dependent Child in Progressive Era America

#### Reading & Writing Instruction

Author	Dissertation Title
Staley, L Kathryn	Where Joy Resides: Four Teacher Educators Evaluate Themselves via Multiple Literacy Artifacts and Reflections

#### Sociology

Author	Dissertation Title
Camacho, Teresita	Depressive Symptomatology among Dominicans: Links to Acculturative and Economic Stressors, Skin Tone, and Perceived Discrimination
Gebo, Erika L	Juvenile Justice Reform: A Tale of Two Systems
Ramirez, Ignacio L	The Relation of Acculturation, Criminal History, and Social Integration of Mexican American and Non-Mexican American Students to Assaults on Intimate Partners
Walsh, Wendy A	Breaking the Norm: Family Characteristics Associated with the Avoidance of Corporal Punishment

#### Zoology

Author	Dissertation Title
Fairchild, Elizabeth A	Winter Flounder <i>Pseudopleuronectes americanus</i> Stock Enhancement in New Hampshire: Developing Optimal Release Strategies
Hochberg, Richard	Comparative Anatomy and Evolution of the Gastrotrich Muscular System
Kraus, Scott D	Birth, Death, and Taxis: North Atlantic Right Whales in the Twenty-First Century
Stevens, Monica A	Influences of Social and Habitat Features on Selection and Use of Breeding Habitat and Pup Survival in South American Fur Seals

### Academic Year of Graduation: Fall 2000 to Summer 2001

#### Biochemistry

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Anderson, Brad D	Identification of Suppressors of spt10 That Affect ADH2 Expression in the Yeast <i>Saccharomyces Cerevisiae</i>
Chen, Junji	The Enzymatic Function Of The CCR4 Protein

#### Chemistry

Author	Dissertation Title
Mack, James	Diels-Alder Reactions Between Fullerene 60 and Various Pentacenes
Milde, Siobhan P.	Remote Optical Fiber Sensing Based on Reflectance Due to the Swelling of Polymer Particles Produced By Dispersion Polymerization
Yang, Min	A Non-Derivatization Approach of HPLC Fluorescence Detection for Some Important Amino Group-Containing Compounds Based on a Ligand Displacement Reaction

#### Earth Sciences

Author	Dissertation Title
Fekete, Balazs M	Spatial Distribution of Global Runoff and its Storage in River Channels

#### Education

Author	Dissertation Title
Fritz, Carol A	The Level of Teacher Involvement In The Vermont Mathematics Portfolio Assessment Process And Instructional Practices In Grade 4 Classrooms
Moody, John H	A Study of Mathematics Course Sequence and Student Performance in Mathematics in a Block Scheduled High School

#### Engineering:Civil

Author	Dissertation Title
Leszkiewicz, Conrad G.	The Effect Of Freeze/Thaw Temperature Fluctuations On Microbial Metabolism Of Petroleum Hydrocarbon Contaminated Antarctic Soil

#### Engineering:Mechanical

Author	Dissertation Title
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## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Kamsah, Nazri B	An Experimental and Finite Element Investigation of Thermally Induced Inelastic Deformation of Single Level Damascene Copper High Density Interconnect Structures

#### Engineering:Systems Design

Author	Dissertation Title
Fredriksson, David W	Open Ocean Fish Cage and Mooring System Dynamics
Hemmett, Jeffrey G	Discrete Modeling of Sculptured Surface Machining for Robust Automatic Feedrate Selection
Ryou, Okhyun	E-Commerce for the Metal Removal Industry

#### English

Author	Dissertation Title
Bowe, Gregory J	Taking a Pedagogical Turn: What Happens When the Student/Teacher Conference Moves to the Center of the Basic Writing Course
Dansdill, Timothy T	The Composition of Anonymity: Toward a Theory, History, and Pedagogy
Dean, Christopher W	Layering Literacies: Computers and Peer Response in the 21st Century
Hallet, Mary E	Grief (W)rites: Composing Loss in the Composition Classroom
Kaufman, Heidi N	Semitic Discourse: English Identity and the Nineteenth-Century British Novel
Paterson, Stephanie D	Embodied Narratives: Ways of Reading Student Literacy Histories

#### History

Author	Dissertation Title
Adams, Gretchen A	The Specter of Salem in American Culture
Adams, Valerie D	A Fine Group Of Fellows: Civilian Advisors, Eisenhower, And National Security Planning
Depaoli, Neill	Life on the Edge: Community and Trade on the Anglo-American Periphery, Pemaquid, Maine, 1610-1689
Fox, John F	"In Passion and in Hope:" The Pilgrimage of an American Radical, Martha Dodd Stern and Family, 1933-1990



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Izecksohn, Vitor	War, Reform and State-Building in Brazil and in the United States: Slavery, Emancipation and Decision-Making Processes in the Paraguayan and Civil Wars (1861-1870)

#### Mathematics

Author	Dissertation Title
Li, Jiankui	Reflexivity, Elementary Operators and Cohomology

#### Mathematics Education

Author	Dissertation Title
Gerson, Hope H	Making Connections: Compartmentalization in Pre-Calculus Students' Understanding of Functions
Gutmann, Timothy B	Mathematics and Socio-Cultural Behavior: A Case Study of the Enculturation of a New Mathematician
Marrongelle, Karen A	Physics Experiences and Calculus: How Students Use Physics to Construct Meaningful Conceptualizations of Calculus Concepts in an Interdisciplinary Calculus/Physics Course

#### Microbiology

Author	Dissertation Title
Nelson, Kim M	Detection of Giardia Lamblia and Cryptosporidium Parvum in the Eastern Oyster (Crassostrea Virginica) Harvested from the Great Bay Estuary
Turick, Charles E	The Physiological Role and Characterization of Melanin Produced by Shewanella Algae Bry

#### Natural Resources

Author	Dissertation Title
Conroy, Andrew B	Maasai Oxen, Agriculture and Land Use Change in Monduli District, Tanzania
Hale, Stephen R	Using Satellite Remote Sensing to Model and Map the Distribution of Bicknell's Thrust (Catharus bicknelli) in the White Mountains of New Hampshire
Ritter, Nur P	Biodiversity and Phytogeography of Bolivia's Wetland Flora
Salas, William A	Optical And Radar Remote Sensing Of Land Use And Land Cover Change In The Tropics: An Assessment Of Deforestation And Secondary Vegetation



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Sherman, Benjamin H	Disturbance Indicators for Time Series Reconstruction and Marine Ecosystem Health Impact Assessment
Silverberg, Judith K	Impacts of Wildlife Viewing: A Case Study of Dixville Notch Wildlife Viewing Area
Westfall, Mary Elizabeth	Relational Learning For A Sustainable Future: An Eco-Spiritual Model

#### Physics

Author	Dissertation Title
Ball, Bryan M	Non-Adiabatic Features in Magnetotail Fast Flows: Orbit Tracing and Data Comparisons
Falcone, Abraham D	Observation and Study of GeV Solar Energetic Particles Using the Milagro Extensive Air Shower Detector
Lin, Jun	Theoretical Mechanisms for Solar Eruptions
Young, Christopher A	Solar Flare Gamma-Ray Spectroscopy With CGRO-Comptel
Zheng, Yihua	Multipoint Measurements Of Field Aligned Current Density In The Auroral Zone

#### Psychology

Author	Dissertation Title
Dearing, Eric C	Parenting And Child Competence: A Longitudinal Investigation Of The Moderating Influences Of Ethnicity, Family Socioeconomic Status, And Neighborhood Quality
Farreras, Ingrid G	Before Boulder: Professionalizing Clinical Psychology, 1896-1949

#### Reading & Writing Instruction

Author	Dissertation Title
Wright, Dale L	It's Not as Thick as it Looks: Unpacking the Rehearsal Practices of Theatre Professionals and the Significance for the Teaching of Reading and Writing

#### Zoology

Author	Dissertation Title
Chavanich, Suchana	Habitat Ecology of the Native Subtidal Snail <i>Lacuna Vincta</i> in the Gulf of Maine and the Impact of Two Introduced Species



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Danley, Patrick D	The Ecological, Behavioral, and Genetic Factors Influencing the Diversification of Lake Malawi's Rock-Dwelling Cichlids
Mungkaje, Augustine J	Ecological Impacts of Shrimp Trawling on Juveniles of Selected Benthic Fish Species in the Southwestern Gulf of Maine

### Academic Year of Graduation: Fall 1999 to Summer 2000

#### Biochemistry

Author	Dissertation Title
Bai, Yongli	Characterization of The Interactions Within The CCR4-NOT Complex and The Interactions Between ADR1 and TFIID Components
Boese, Kathrine queta F	The mut2 Mutator of Caenorhabditis Elegans

#### Chemistry

Author	Dissertation Title
Doherty, Stephen A	Swellable Polymer Substrates for Use in Magnetochemical and Optical Chemical Sensing
Park, Gyungse	Transition Metal Complexes of Novel Ligands Derived from the CIS,CIS-1,3,5-Triaminocyclohexane (TACH) Framework: Structural and Biological Studies
Shao, Junlong	Improvements of X-band and Q-band EPR/ENDOR Spectrometers. Studies of Ferritin Iron Nitrosyl and Copper cis, cis-1,3,5-Triaminocyclohexane Chloride Complexes, and the Application of Q-band EPR to the Dating of Fossil Teeth
Sun, Xiankai	Rational Design and Synthesis of 4-Phosphio-Catechol Hybrid Ligands for Mixed-Metal Clusters
Verbicky, Christopher A	The Chain Extension of B-Keto Phosphonates and the Synthesis of Polycyclopropanes
Wang, Hongming	Nitrated Poly (4-Hydroxystyrene) Microspheres for Optical pH and Potassium Ion sensing Based on Turbidity Changes Accompanying Polymer Swelling

#### Earth Sciences

Author	Dissertation Title
Jordan, Carolyn E	Atmospheric Transport and Deposition of Water-Soluble Nitrogen to the Gulf of Maine
Varnier, Ruth K	Biogeochemical Cycling of Methyl Bromide in Soils



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### Economics

Author	Dissertation Title
Carvalho de Sena, Augusto	On the Quest for Economic Growth and Development: The Developing World the Failures Based on Physical Capital Accumulation and International Rescuers and the Emergence of a New Perspective
Daley, Michael C	An Image of Enduring Plurality in Economic Theory: The Root-Metaphor Theory of Stephen C. Pepper
Harper, Wendy	A Comparison of Direct Methods For Valuing Environmental Amenities: A Case Study of the White Mountain National Forest

#### Education

Author	Dissertation Title
Kossakoski, Stephen A	The Percieved Effects of State-Mandated Testing in New Hampshire
Vascak, Cynthia W	Composing Compassion: Developing Care Communities Via Engagements in the Visual Arts

#### Engineering:Mechanical

Author	Dissertation Title
Bilgili, Ata	Finite Element Modeling of Tidal Flow and Bed-Load Transport in the Great Bay Estuarine System, New Hampshire
Erturk, Safak N	Modeling the Friction Effects of Eelgrass on the Tidal Flow in Great Bay, NH

#### English

Author	Dissertation Title
Keyes, Carol A.	Language's "Bliss of Unfolding" in and Through History Autobiography and Myth: The Poetry of Rita Dove
Quinn, Laurie A	Reading for Class Virginia Woolf Rebecca West and Sylvia Townsend Warner
Stroup, William J	Shelley and the Nature of Nonviolence
Williams, Bronwyn T	Tuned In: Television and the Teaching of Writing

#### History

Author	Dissertation Title
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## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Chapin, David A	Exploring Other Worlds: Margaret Fox, Elisha Kane and the Antebellum Culture of Curiosity
Lord, Frances H	Piety Politeness & Power: Formation of a Newtonian Culture in New England
Moyer, Judith Nichols	Number Please: New Hampshire Telephone Operators in the Predial Era 1877-1973

#### Mathematics

Author	Dissertation Title
Hall, Jeffrey A	Using Character Varieties Presentations Invariants Divisibility and Determinants

#### Microbiology

Author	Dissertation Title
Moore, Amy S	The Development of RNA Probe and RT PCR Assays for the Detection of Enteroviruses in Sludge

#### Natural Resources

Author	Dissertation Title
Aitkenhead-Peterson, Jacqueline	Source, Production and Export of Dissolved Organic Carbon and Nitrogen
Campbell, Petya E	Remote Sensing of Forest Damage in the Czech Republic Using Hyperspectral Methods
Harmon, Mary C	Sustainable Living -- A Case Study of Nuns and Their Beliefs Attitudes and Practices
Morgan, Pamela A	Conservation and Ecology of Fringing Salt Marshes Along the Southern Maine/New Hampshire Coast
Ollinger, Scott V	Carbon and Nitrogen Dynamics of Northeastern U.S. Forests in Response to Environmental Stress: Measurements and Models at Local to Regional Scales.
Smith, Marie-Louise	Landscape-Scale Prediction of Forest Productivity by Hyperspectral Remote Sensing of Canopy Nitrogen
Tu, Kevin P	Modeling Plant-Soil-Atmosphere Carbon Dioxide Exchange Using Optimality Principles
Weitz, Antje M.	Soil Hydraulic Controls Over Nitrogen Oxide Emissions and Nitrogen Cycling in Tropical Agriculture

#### Physics

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Arndt, Martina B	X- and Gamma-Ray Observations of the 15 November 1991 Solar Flare
Cochechi, Cristian C	A Statistical Study of the Dependence of the Integrated Wave Power of Geomagnetic Pulsations Between 0.1 Hz and 1.0 Hz Upon the Solar Wind Dynamic Pressure
Pietrowski, David	Multipoint Measurements of Large Electric Fields and Shears in the Auroral Zone

#### Plant Biology

Author	Dissertation Title
Anderson, Mark G.	Viability and Spatial Assessment of Ecological Communities in the Northern Appalachian Ecoregion

#### Psychology

Author	Dissertation Title
Chabot, Heather F	Predicting Ageist and Sexist Attitudes and the Conditions for Their Existence
Cook, Anne E	The Moses Illusion in Reading Comprehension
Mangan, Michael A	Internet Use and its Relation to Mental and Physical Health Among Older Adults

#### Reading & Writing Instruction

Author	Dissertation Title
Mueller, Pamela Nottage	Lifers: A Study of At-Risk Adolescent Readers
Rothermel, Daniel A	Using Writing Composition Pedagogy in an Introductory Teacher Education Practicum to Learn About the Motivations, Journeys and Understandings of Preservice Teachers

#### Zoology

Author	Dissertation Title
Lovely, Eric C	Evolution of Pycnogonid Life History Traits
Turtle, Sarah L	The effects of Ultra Violet Radiation, Highway Contamination , and Synergism of the Two on Spotted Salamander Embryos

**Academic Year of Graduation: Fall 1998 to Summer 1999**

# UNH Graduate School

## Doctoral Dissertations from Fall, 1990 to Present

### Biochemistry

Author	Dissertation Title
Badarinarayana, Vasudeo	Functional Characterization of the CCR4-NOT Transcriptional Regulatory Complex
Hogan, Jennifer D	Isolation and Characterization of a Caenorhabditis Elegans SRC Loss-of-Function Allele Using Reverse Genetics

### Chemistry

Author	Dissertation Title
Miele, Eric W	Preparation and Characterization of Derivatized Microparticles Immobilized in Hydrogel Membranes for Optical Chemical Sensing Based on Polymer Swelling
Reed, David P	Synthesis of Vicinal Bisamidines and Bisaminals for the Preparation of Tetraazamacrocycles and the Synthesis of Cross-Bridged Cyclam Derivatives and Studies on their Complexation of Small Cations

### Computer Science

Author	Dissertation Title
Sabin, Daniel	A Constraint Based Framework for Configuration

### Earth Sciences

Author	Dissertation Title
Shrestha, Arun B	Physical and Chemical Climate in the Nepal Himalaya
Zdanowicz, Christian M	Paleoclimatic Significance of Insoluble Microparticle Records from Canadian Arctic and Greenland Ice Cores

### Economics

Author	Dissertation Title
DeFelice, Lisa C	The Effects of Medicaid and Maternal Depression on Prenatal Care and Infant Health
Martel, Robert J	Money Output and Real Wages in a New Keynesian Framework with Heterogeneous Labor and Monopsonistic Firms
Sedgley, Norman H	The Role of Industrial Innovation in Growth and Convergence Across the US States

### Education

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Catlaw, Kerriann	Problem Based Learning in Athletic Training Education
Craven, Bradford W	Alternative Teacher Compensation Systems: Practices and Perceptions as Reported by New Hampshire Principals
Cushing, George A	Analysis of Impact and Value of NEASC High School Accreditation Procedures on School Accountability And School Improvement From 1987- 1997
Freeman, John J	The Teaching Portfolio as a Vehicle for Professional Growth
Inzenga, Andrew	Learning to Read Music Cooperatively in a Choral Setting a Case Study
Lucas, Katharina Fachin	Mentoring in Adolescence: A Sociocultural and Cognitive Developmental Study of Undergraduate Women and Sixth Grade Girls in a Mentoring Program
Moorhead, Cari A E	Queering/Querying Identities: The Roles of Integrity and Belonging in Becoming Ourselves

#### Engineering

Author	Dissertation Title
Kraft, Barbara P	Three-dimensional Imaging of Turbulent Flows: Optical Tomography with Proper Orthogonal Decomposition
Visegrady, Tamas L	Hardware-Software Codesign in a High-Level Synthesis Environment
Wu, Qunwei	The Influence of Chloride on Interface Kinetics and Morphology of Copper Electrodeposits on Copper Single Crystals

#### English

Author	Dissertation Title
Beard, Jennifer J	Barbara Pym's Narrative Intersections
Lecourt, Nancy H	Motherwork, Artwork: The Mother/Artist in Fiction by Parton, Phelps, Chopin, Woolf, Drabble, and Walker
Olbricht, Erica M	Class in Seventeenth-Century British Drama by Women
Von Rosk, Nancy H	Domestic Visions and Shifting Identities: The Urban Novel and the Rise of a Consumer Culture America, 1852-1925

#### History

Author	Dissertation Title
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## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Foley, Michael S.	Confronting the War Machine: Draft Resistance During the Vietnam War
Hancock, Scott	The Law Will Make You Smart Legal Consciousness Rights Rhetoric and African American Identity Formation in Massachusetts 1641-1855
Leavenworth, William B	The Ship in the Forest: New England Maritime Industries and Coastal Environment 1630-1850
Schmidt Blaine, Marcia	Ordinary Women: Government and Custom in the Lives of New Hampshire Women, 1690-1770

#### Mathematics

Author	Dissertation Title
Capozzoli, Michelle H	New Methods for Modeling Accelerated Life Test Data
Demas, Damon A	The Word Problem and the Ideal Membership Problem
McSweeney, Laura A	Dynamic Analysis of Unevenly Sampled Data with Applications to Statistical Process Control
Parker, Andrew T	Topics in Chaotic Secure Communication
Pendharkar, Hemant A	Central Sequences and C* - Algebras

#### Microbiology

Author	Dissertation Title
Krinos, Corinna M	The Role of Cytokines in the Pathogenesis of Experimental Legionella Pneumophila Infections

#### Natural Resources

Author	Dissertation Title
Davis, Ryan C	The Effects of Physical and Biological Site Characteristics on the Survival and Expansion of Transplanted Eelgrass ( <i>Zostera Marina L.</i> )
Goodale, Christine L	The Long-Term Effects of Disturbance on Nitrogen Cycling and Loss in the White Mountains, New Hampshire
McSwiney, Claire P	Controls on Spatial and Temporal Variability in Nitrous Oxide Fluxes across a Tropical Rainforest Ecosystem in the Luquillo Experimental Forest, Puerto Rico



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### Physics

Author	Dissertation Title
Gelinas, Lynette J	An In-Situ Measurement of Charged Mesospheric Dust during a Sporadic Atom Layer Event
Janoo, Laurence X	Some Observations of Magnetic Clouds and Simulations of a Normal Fast Shock Interaction with an Idealized Magnetic Cloud

#### Psychology

Author	Dissertation Title
Burk, Joshua A	Effects of Intralaminar Thalamic Nuclei, Prefrontal Cortical, and Hippocampal Lesions on a Seven Choice Serial Reaction Time Task
Hansberry, Marie T	Fixation and Incubation Effects in Problem Solving
Kraft, John R	The Ideal Free Distribution of Group Choice: A Social Psychology of Human Behavior
Porter, Mary C	The Effects of Reversible Inactivation by Lidocaine of Ventral Striatum and Intralaminar Nucleus of the Thalamus in Match to Sample Tasks with and without Delays Trained in the Lever Box

#### Reading & Writing Instruction

Author	Dissertation Title
Bianchi, Lisa L	Finding a Voice: Poetry and Performance with First Graders
Hawkins, Carol A	Memoirs Movements and Meaning Teacher/Student Research in Freshman Composition
Pantano, Julie A	At the Heart of it: Middle School Writers Use Talk and Multi-Media Journals to Forge a Literate Classroom Community
Wilson, Georgia P.	Thinking Through Performance Children Make Sense of Characters and Social Relationships Through a Gesture Based Theatre Convention Tableau

#### Sociology

Author	Dissertation Title
Lauer, Sean R	Small Firms, Global Economies: The Economic Sociology of the NorthWest Atlantic Sea Urchin Industry
Mahaffy, Kimberly A	When Does Gender Matter? Explaining the Transition to Adulthood as a Gendered Process



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### Zoology

Author	Dissertation Title
Jury, Steven H	Behavioral and Physiological Responses of the Lobster, <i>Homarus Americanus</i> , to Temperature: A New Synthesis

#### Academic Year of Graduation: Fall 1997 to Summer 1998

#### Animal & Nutritional Sciences

Author	Dissertation Title
Garthwaite, Brian D	Ruminally Undegraded Protein and Ruminally Protected Amino Acids for Dairy Heifers
Reilly, Ruth R	Factors that Influence the Decision Regarding Hormone Replacement Therapy in Postmenopausal Women

#### Biochemistry

Author	Dissertation Title
Komarnitsky, Filipp B	Investigation of the Mechanism of ADR1 Mediated Transcriptional Activation

#### Chemistry

Author	Dissertation Title
Bradley, Alexander Z	Novel Pericyclic Routes to Strained Organic Molecules: Theoretical and Experimental Studies
Brogan, John B	Novel Arrangements of Oxonium Ylides and Chain Extension of Beta-Ketoesters
Hernandez, Susana	New Synthetic Routes to Strained Cumulences and Reactive Carbenes
Niese, John A	The Structural Optimization of Atomic and Molecular Microclusters Using a Genetic Algorithm in Real-Valued Space-Fixed Coordinates
Zhang, Li	Sensors for pH based on Swelling Force and Reflectivity of Derivatized Polystyrene Beads and Membranes

#### Computer Science

Author	Dissertation Title
Kao, David T	A Metric-Based Scientific Data Model for Knowledge Discovery

#### Earth Sciences

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Kreutz, Karl J	Ice Core Glaciochemical Records of Late Holocene Climatic Variability in West Antarctica
Lefer, Barry L	The Chemistry and Dry Deposition of Atmospheric Nitrogen at a Rural Site in the Northeastern United States
Moosavi, Sadredin C	Controls on CH <sub>4</sub> Emissions from Boreal and Arctic Wetlands

#### Education

Author	Dissertation Title
Clark, Pamela L	Perceptions of New Hampshire Teachers and Supervisors Regarding Teacher Supervision
Laba, Karen A	Influences on Teachers' Curricular Choices in Project-Based Science Classrooms
Moran, Mary Jane	Reconceptualizing Early Childhood Preservice Teacher Education: A Pedagogy of Collaborative Inquiry
Moss, David M	Examining Student Conceptions of the Nature of Science from Two Project-Based Classrooms
Wetzel, Fred J	Differences in Achievement Across Item Types on the AP US History Examination: The Relationship of Sex, Gender Identity, Cognitive Orientation, and Conception of the Nature of Historical Knowledge to Domain-Specific Academic Performance

#### Engineering

Author	Dissertation Title
Campagna, David P	Stability and Weight Smoothing in CMAC Neural Networks
Kempf, Martin H	Fluid-Structure Interaction in Taylor-Couette Flow
Valverde, Norbert A	A Very High Level Logic Synthesis

#### English

Author	Dissertation Title
Barrett, Stephen R	This Gonna Hurt Like Hell: A Pentecostal Student Enters the Academy
Digeronimo, Gretchen E	Transactional Bond in the Novels of Charles Brockden Brown
Hodgkins, Deborah L.	Constructive Texts: Theory, Practice and the "Self" in Composition

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Kasik, Dorothy R	Issues of Engendered Entitlement: Who Owns the Classroom? Who Owns Knowledge?
Kountz, Carol	The Role of Shame in Writing: How Lived Experience Affects the Writing Process
Malone, Anne R	Unruly Acts: An Inquiry into the Art of Letter Writing

#### Genetics

Author	Dissertation Title
Lepage, Keith T	Non-Major Histocompatibility (B) Complex Effects on Rous Sarcomas and V-SRC-Induced Tumors

#### History

Author	Dissertation Title
Agnew, Aileen B	Silent Partners: The Economic Life of Women on the Frontier of Colonial New York
Fidler, Douglas K	Preparing the Way of the Lord: Three Case Studies of Ministerial Preconditioning in Congregations before the Great Awakening, 1675-1750
Hill-Zeigler, Patricia J	In the Name of the Father: The Continuity and Paradox of Puritan Theology and Pastoral Authority
Hogsett, Stacy L	"The Tawnee Family": The Life Course of Indian Value Adaptation for Eleazar Wheelock's Indian Scholars
Kanes, Candace A	American Business Women, 1890-1930: Creating an Identity
Murphy, Edith P	Skillful Women and Jurymen: Gender and Authority in Seventeenth-Century Middlesex County, Massachusetts

#### Mathematics

Author	Dissertation Title
Portnoy, Neil	Differentiation and Composition on the Hardy and Bergman Spaces

#### Microbiology

Author	Dissertation Title
Hogan, Shannon P	Alternative Removal Methodologies for Environmental Waters



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Maganti, Srinivas	Attachment of <i>Listeria Monocytogenes</i> to Murine and Human Phagocytic Cells

#### Natural Resources

Author	Dissertation Title
Hoven, Heidi M	Eelgrass ( <i>Zostera marina</i> L.) as a Sentinel Accumulator of Lead in Portsmouth Harbor, New Hampshire - Maine
Jenkins, Jennifer C	Measuring and Modeling Northeastern Forest Response to Environmental Stresses.
Lutz, John K	Timber Price Trends
McCracken, Kimberly L	Dynamics of Dissolved Organic Carbon during Weathering and Soil Formation
Okoye, Michael A	Ecological Database Development and Analyses of Soil Variability in Northern New England
Schauffler, F Marina	Turning to Earth: Paths to an Ecological Practice
Smith, Douglas F.	Foraging Strategies of Two Sympatric Lagomorphs: Implications of Habitat Fragmentation

#### Physics

Author	Dissertation Title
Brautigam, Donald H	Response of Outer Radiation Belt Electrons to a Magnetic Storm
Dors, Eric E	Effects of Non-Maxwellian Auroral Source Electrons
Kappadath, Srinivas C	Measurement of the Cosmic Diffuse Gamma-Ray Spectrum from 800 keV to 30 MeV
Kontodinas, Ioannis D	Energy Flow and Non-Guiding Center Effects in the Earth's Magnetotail
Mihaila, Bogdan	Ground State of O-16
Pomeroy, Vance R.	Spin-Exchange Polarized <sup>3</sup> He Using Optically Pumped Alkali Atoms for Magnetic Resonance Imaging and Neutron Spin-Filters
Wang, Kemei	Source and Acceleration of Energetic HE <sup>+</sup> Ions at the Earth's Bow Shock

#### Plant Biology



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Ganger, Michael T	Reproductive Ecology of Canada Mayflower ( <i>Maianthemum canadense</i> )
Li, Jianhua	Systematics of the Hamamelidaceae based on Morphological and Molecular Evidence
Zhao, Jianqiang	Bioavailability of Nutrients and Metals Following Land Application of Organic Wastes

#### Psychology

Author	Dissertation Title
Coleman, Jennifer G	Character Prominence and Perspective in Narrative Comprehension
Smirles, Kimberly A	The Sexual Harassment Paradox in Graduate School: Experiences and Answers

#### Reading & Writing Instruction

Author	Dissertation Title
Cavalcante, Francisco S.	Literacies Without Judgment: Composing a (Con)Text for Cultural Healing in Northeast Brazil
Cohen, Cynthia E	A Poetics of Reconciliation: The Aesthetic Mediation of Conflict
Kaufman, Douglas K	In Pursuit of a "Good Healthy Chat": The roles of organization and rapport-building in effective middle school literacy instruction.
Seger, F Dan	Music and the General Classroom: Literacy in a New Key

#### Sociology

Author	Dissertation Title
Cervi, Daniel D	Gender and Personality in the Stress Process
Pomeroy, Judith J.	The Social Construction of Feminine Sexualities in Women's Popular Periodicals: 1920 to 1996
Ross, Susan Marie	The Field of Meanings of Childlessness in Contemporary Film Culture
Walsh, Margaret M	Mothers' Helpers: The Resources of Female-Headed Families in a Working Class Community
Yodanis, Carrie L	A Place in Town: Women Producing Cultural Stratification

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### Zoology

Author	Dissertation Title
Markert, Jeffrey A	Population Structure and Phylogenetic History of the Lake Malawi Cichlid Species Flock
Schloss, Annette L	The Use of an Artificial Light System to Assess the Influence of Relative Light Change of Diel Activity Cycles of Nymphs of the Mayfly, <i>Stenonema Modestum</i> , in the Presence and Absence of Predators

#### Academic Year of Graduation: Fall 1996 to Summer 1997

#### Animal & Nutritional Sciences

Author	Dissertation Title
Judd, Stephen G	Beta-Carotene in the Bovine Corpus Luteum
Wasserstrom, Vicky M	Optimizing Lysine and Methionine Nutrition during the Periparturient and Postparturient Periods

#### Biochemistry

Author	Dissertation Title
Wooll, John O	Investigation of pd(A) pd(T) in the Analytical 20 Electrophoresis Apparatus

#### Chemistry

Author	Dissertation Title
Proulx-Curry, Pamela M	Construction of an X-Band Electron Nuclear Double Resonance Spectrometer and Partial Characterization of an Iron Nitrosyl Complex of Transferrin
Rooney, Michael T	Polymer Substrates for Optical Chemical Sensing

#### Computer Science

Author	Dissertation Title
Wong, Pak C	Adaptive Multiresolution Visualization of Large Multidimensional Multivariate Scientific Datasets

#### Earth Science: Geology

Author	Dissertation Title
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## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Pinous, Oleg V	Quantified Sea Level History for the Middle Jurassic (Bajocian) through Cretaceous (Santonian) Based on Russian Platform and Siberian Stratigraphic Data

#### Earth Sciences

Author	Dissertation Title
Braswell, Bobby H.	Global Terrestrial Biogeochemistry: Perturbations, Interactions and Time Scales
Sharma, Keshav P	Impact of Land-Use and Climatic Change on Hydrology of the Himalayan Basin: A Case Study of the Kosi Basin
Shipham, Mark C	An Analysis of High Frequency Methane Measurements in Central New England

#### Economics

Author	Dissertation Title
Houtenville, Andrew J	Student Achievement, Parental Effort and Schooling

#### Education

Author	Dissertation Title
Aubry, Valerie S	Talk Before Writing: Oral Rehearsal as a Pre-Writing Strategy for High School Students with Difficulties in Retrieval
Chamberlain, Elizabeth M	Power Play: Sexual Harassment in the Middle School
Mulligan, Carol W	Sharing Reality: The Construction of Professional Knowledge in a Middle School Team Setting
Rivet, Elizabeth A	The College President and the Technology Leader: Defining a New Role in Campus Planning

#### Engineering

Author	Dissertation Title
Albert, Robert V	Fume Generation in Gas Metal Arc Welding
Archambeault, Bruce R	Modeling of the Electromagnetic Radiation from Shielded Enclosures with Apertures and Attached Wires in a Real-World Environment
Benbrahim, Hamid	Biped Dynamic Walking Using Reinforcement Learning



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Goulet, Ronald U	An Experimental Investigation of the Effects of Elastic Modulus and Yield Strength on Fracture Surface Interference in Shear Loaded Cracks
Kem, Jan A	Full-Scale Comparative Evaluation of Two Slow Sand Filter Cleaning Methods
Kesan, Mete	Dynamic Response of Poroelastic Materials Containing Bingham Fluid: Application to Electrorheological Fluids
Kun, Andrew L	A Sensory-Based Adaptive Walking Control Algorithm for Variable Speed Biped Robot Gaits
Xiao, Jewen	Numerical Analysis for Blood Distribution in Complete Flow Cross-Section Microvascular Networks
Zhmurkin, Dmitry V.	An Experimental Investigation of Thermally Induced Deformation of 1 Micron Thick Copper/Tantalum/Polyimide High Density Interconnect Structures

#### English

Author	Dissertation Title
McCallum, Paul H	Public Poetry, Memory, and the Historical Present: 1660-1745
Payne, Michelle M	Bodily Discourses: When Students Write about Sexual Abuse, Physical Abuse, and Eating Disorders in the Composition Classroom
Svehla, Lance M.	Composition as a Mode of Being: Politics, Ethics and History in the Writing Classrooms of Postmodernity

#### History

Author	Dissertation Title
Jordan, William G	"Getting America Told": The Black Press and Its Dialogue with White America, 1914-1919
Nichols, Elisabeth B	"Pray Don't Tell Anybody that I Write Politics": Private Expressions and Public Admonitions in the Early Republic
Richards, David L	"A City of Vivid Contrasts": Antimodernity and Modernity at the Poland Spring Resort, 1860-1900

#### Mathematics

Author	Dissertation Title
Cransac, Adriana B	Perfect Matchings: Modified Aztec Diamonds, Covering Graphs, and n-Matchings



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Cullinane, Michael J	Contributions to the Theory of Neighborhoods and Its Applications
Neveu, Lawrence V	Contributions to the Theory of Distance Functions and Its Application in General Topology
Poplicher, Mihaela-Anca	On Some Range Inclusions

#### Mathematics Education

Author	Dissertation Title
McCrone, Sharon Marie	Students Interactions and Mathematics Discourse: A Study of the Development of Discussions in a Fifth Grade Classroom

#### Microbiology

Author	Dissertation Title
Bacon, David J	Molecular Characterization of a Cytotoxic Porin Protein from <i>Campylobacter jejuni</i> and its Role in Campylobacteriosis
Negm, Robert S	Porin Proteins of <i>Salmonella Typhimurium</i> Mediate Adherence to Microphages
Regan, Patrick M	Development and Application of Molecular Techniques for the Detection of Human Enteric Viruses in Environmental Samples
Rooney-Varga, Juliette N	Phylogenetic Diversity and Community Structure of Sulfate-Reducing Bacteria in a Salt Marsh Sediment
Smith, L Mary	Receptors and Ligands Involved in the Recognition of Group B Streptococci by Human and Bovine Phagocytic Cells

#### Natural Resources

Author	Dissertation Title
Lu, Zhaosong	The Mechanism and Kinetics of Conway Granite Weathering in Aqueous Solutions at Low Temperature and Pressure

#### Physics

Author	Dissertation Title
Lampert, Melissa A	Time Evolution of the Chiral Phase Transition during a Spherical Expansion
Tutein, Alan B	Absorption and Fluorescence Spectra of Sodium in an Argon Matrix

#### Plant Biology



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Lord, Leonard A	Competition and Dispersal in the Regulation of Plant Species Richness on <i>Carex stricta</i> Tussocks
Padgett, Donald J	A Biosystemic Monograph of the Genus <i>Nuphar</i> sm (Nymphaeaceae)

#### Psychology

Author	Dissertation Title
Black, Katherine A	Parallels between Adolescent-Mother and Adolescent-Best Friend Interactions
Clark, Steven C	Judging Contingencies Accurately: The Effects of Feedback, Practice, and Self-Efficacy
Geher, Glenn	The Effects of Actual and Perceived Parental Characteristics on Partner Selection and Perception
Geher, Kathleen P	The Role of Perceived Social Norms on Attitudes and Behavior: An Examination of the False Consensus Effect
McGarva, Andrew R	Perceived Versus Actual Attitude Similarity as Predictors of Change in Interpersonal Attraction
Miller, Lisa Soederberg	The Effects of Age and Expertise on Discourse Processing
Mitchell, Dennis C	Repression and Relief: Mood and Cardiovascular Changes following Threat, Thinking about Threat, and Threat Removal for Repressors and Nonrepressors
Presson, Paul K	The Multidimensionality of Illusory Judgments: Reexamination of Illusion of Control Research
Regeth, Rebecca A	Relativistic Thinking and Identity Development in College Students

#### Sociology

Author	Dissertation Title
Lamborghini, Nita M	The Female Coach in the World of Collegiate Sport: Accommodation and Resistance to the Dominant Sport Culture
Schieman, Scott D	Psychosocial and Sociostructural Determinants of Mastery: The Context of Age and Disability

#### Zoology

Author	Dissertation Title
Cascon, Helena M	Predation by <i>Nucella lapillus</i> (Linnaeus, 1758) on <i>Littorina obtusata</i> (Linnaeus, 1758) and <i>Mytilus edulis</i> (Linnaeus, 1758)

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Cascon, Paulo	Variation in Reproductive Success within a Natural Population of the American Toad ( <i>Bufo americanus</i> )
Lawrence, Kathryn A	Neuroethology of the Swimming Behavior in the Pacific Nudibranch, <i>Melibe leonina</i>
Medeiros-Bergen, Dorothy E	Molecular Identification, Coastal Distribution and Recruitment of <i>Cucumaria Frondosa</i> Larvae in the Western Gulf of Maine

### Academic Year of Graduation: Fall 1995 to Summer 1996

#### Animal & Nutritional Sciences

Author	Dissertation Title
Castro, Antonio C	A Proposed Acrosomal System for Identifying Stages of the Cycle of the Seminiferous Epithelium and a Model for the Kinetics of Spermatogenesis in the Rabbit

#### Biochemistry

Author	Dissertation Title
Almeida, Craig A	Targeted Gene Replacement to Mimic Familial Hypertrophic Cardiomyopathy in <i>Caenorhabditis elegans</i>
Liu, Hai-yan	Isolation and Characterization of the CCR4 Associated Factors

#### Chemistry

Author	Dissertation Title
Clothier, James G	Chiral Separations Using Bile Salts in Capillary Electrophoresis
Falke, Anne M	Formation and Fate of Methyltin Compounds in the Great Bay Estuary (New Hampshire)
Hattan, Stephen J	The Purification and Characterization of an Extrapallial Fluid Protein from the Mollusc, <i>Mytilus Edulis</i>
Parthum, Kimberly A	Interactions of Conjugated and Unconjugated Bile Salts with Model Phospholipid Membranes: Vibrational Spectroscopic Studies
Wang, Wenge	Development of Q-Band EPR/Endor Spectrometer and EPR/ENDOR Studies of Dinitrosyl Iron Model Complexes
West, Craig A	I. Synthesis and Dynamic Studies of Bifunctional Compounds Having Potential Intramolecular Interactions II. Controlled Release Antifouling Coatings: Approaches to Controlled Release of Gamma-Decanolactone & 2-Hexanoylfuran into Seawater



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### Computer Science

Author	Dissertation Title
Goransson, Paul N	Distributed Cell Scheduling and Quality of Service in ATM Networks

#### Earth Science: Oceanography

Author	Dissertation Title
Dasilveira, Ilson C	Meandering and Eddy Formation in Separating Western Boundary Currents

#### Earth Sciences

Author	Dissertation Title
Sanchez-Azofeifa, G Arturo	Assessing Land Use/Cover Change in Costa Rica
Yang, Qinzhaoh	Snow and Ice Chemistry Study of the Greenland Ice Sheet

#### Economics

Author	Dissertation Title
Neidhart, James J	The Evolutionary Dimension within Economic Thought

#### Education

Author	Dissertation Title
Carroll, Thomas J.	An Analysis of the Relationship between Funding Levels and Expenditure Patterns in New Hampshire High Schools 1985-86 to 1993-94
Hodgdon, David G.	Critical Thinking: A Voyage of the Imagination
Lauten, Alice D	Profiles of Reform in the Teaching of Calculus: A Study of the Implementation of Materials Developed by the Calculus Consortium Based at Harvard (CCH) Curriculum Project
Makris, Marcia A.	Changes in Self-Sufficiency: A Feminist Approach to Literacy Program Evaluation
Pike, John E	Performance Management within Cooperative Extension: Perceptions of Extension Educators in the Northeast Region

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Struck, Mildred H	The Relationship between Intellectual Development Using Hunt's Paragraph Completion Method and Buczynski's Ways of Knowing Inventory and Collaboration in Full-Year Student Intern and Cooperating Teacher Supervisory Pairs
Wyckoff, Susan C	Student Satisfaction with Faculty Advisors: Influences on Retention in Higher Education

#### Engineering

Author	Dissertation Title
Bianchi, Charles H	A System Model for Multipath Interference on Terrestrial Line-of-Sight QAM Digital Radio
Ho, Shine	Analysis and Design of AC Induction Motors with Squirrel Cage Rotors
McLarnon, Christopher R	Nitrogen Oxide Decomposition by Barrier Discharge
Upton, Timothy D	Experiments on Transient Natural Conduction in Inclined Enclosures Using Calibrated Multichannel Electronic Interferometry and Digital Particle Image Velocimetry
Zhang, Fan	Characterization of Supported Molybdenum Sulfide Catalyst ex Ammonium Tetrathiomolybdate

#### English

Author	Dissertation Title
Jones, Donald C	Beyond the Post-Modern Impasse of Contemporary Composition: The NonFoundational Alternative of Deweyan Pragmatism
Jones, Keith R	Education, Class and Gender in George Eliot and Thomas Hardy
Stepanski, Lisa M	"There is No School like the Family School:" Literacy, Mother-teaching, and the Alcott Family

#### Genetics

Author	Dissertation Title
Glasner, Jeremy D	Variation in Transposable Element Sequence and Activity in the Nematode <i>Caenorhabditis Elegans</i>
Perna, Nicole T	Patterns of base Composition within and between Animal Mitochondrial Genomes

#### History



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
McGuckin, Sheila O	The Theater of the Absurd in Europe and America: Sartre, Beckett, Pinter, Albee and Drama Criticism
Walsh, James L	Friend of Government or Damned Tory: The Creation of the Loyalist Identity in Revolutionary New Hampshire, 1774-1784

#### Mathematics

Author	Dissertation Title
Mihaila, Ioana C	Composition Operators on Riemann Surfaces

#### Mathematics Education

Author	Dissertation Title
Curran Buck, Judith	An Investigation into Students' Conceptual Understandings of the Graphical Representation of Polynomial Functions

#### Microbiology

Author	Dissertation Title
Knight-Connoni, Victoria K	Ecophysiology of Metal-Reducing Aeromonas and Shewanella Strains from Great Bay Estuary
Pierce, Marcia	Characterization of the Adherence Mechanisms of Listeria Monocytogenes to Host Cells and Their Role in the Pathogenesis of Listeriosis

#### Natural Resources

Author	Dissertation Title
Hallett, Richard A	Foliar and Soil Nutrient Relationships in Red Oak and White Pine Forests

#### Physics

Author	Dissertation Title
Hersh, Benjamin Vaughn A	Photometric Studies of Cygnus X-1 from 322-473 keV with the Solar Maximum Mission
Larson, Douglas J	Cross-Tail Current Carriers in a Two-Dimensional Equilibrium Magnetotail Model
Litvinenko, Yuri E	Aspects of Particle Acceleration in Solar Flares
Miller, Richard S	A Search for Radiative Neutrino Decay and Its Potential Contribution to the Cosmic Diffuse Gamma-Ray Flux



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Peria, William J	Rocket Observations of the HF Heated Ionosphere

#### Plant Biology

Author	Dissertation Title
Cundari, Christina M	Relationship of Critical Photoperiod of Short-Day Parents to Frequency of Day-Neutral Progeny in Short-Day x Day-Neutral Crosses of <i>Fragaria</i> x <i>Ananassa</i>

#### Psychology

Author	Dissertation Title
Bryan-Markley, Joy L	Imaginary Companions in Preschool-Aged Children: A Theoretical Examination, An Exploration of the Role of Parents, and a Study of the Relationship between a Child and Her Imaginary Companion
Ehlert, Michael B	Molar and Local Effects of the Fixed-Ratio Changeover Requirement on Choice, Changeovers, and Visits: A Parametric Examination of the Fixed-Ratio Changeover Requirement
Grace, Randolph C	Temporal Context and Choice
Rizzella, Michelle L	The Generation of Predictive Inferences and the Availability of Contextual Information
Strowman, Shelley R	The Relationship between Media Exposure and Body Satisfaction: An Examination of Moderating Variables Derived from Social Comparison Theory
Zhang, Yue P	The Effects of Primary Olfactory Cortical and Thalamic Lesions on Olfactory Continuous Non-Matching to Sample and Discrimination in the Rat

#### Reading & Writing Instruction

Author	Dissertation Title
Kelly, Gerald J.	Giving Voice to the Spirits: Storytelling in the Service of Belizean Literacy

#### Sociology

Author	Dissertation Title
Day, Bruce P.	The Role-Set of the Truck Driver: Issues of Worker Autonomy, Ideology, and Identity

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Jasinski, Jana L	Structural Inequalities, Family and Cultural Factors, and Spousal Violence among Anglo and Hispanic Americans
Leonard, Candice J	Illusions of Change: An Analysis of the Fatherhood Discourse in Parents Magazine, 1929-1994

#### Zoology

Author	Dissertation Title
Carlson, David B	Population Dynamics and Recruitment Ecology of Some Caribbean Reef Corals
Chester, Charles M	Life History and Reproductive Biology of the Estuarine Nudibranch <i>Tenellia adspersa</i> (Normann, 1845)
Nemeth, Richard S	Ecological Patterns During Ontogeny in the Bicolor Damselfish, <i>Stegastes partitus</i> , Poey

#### Academic Year of Graduation: Fall 1994 to Summer 1995

#### Animal & Nutritional Sciences

Author	Dissertation Title
Socha, Michael T	Determining the Methionine Requirements of Lactating Dairy Cows

#### Biochemistry

Author	Dissertation Title
Coccia, Vincent J	Nucleotide and Energy Metabolism During Visual Transduction in Electropermeabilized Rod Outer Segments
Moody, Thomas P	Physical Studies of Limulus, the Coagulin Gel and Coagulin Gel Formation

#### Chemistry

Author	Dissertation Title
Barrett, Yu Chen	Characterization of Radical Formation and Iron Oxidation/Hydrolysis during Iron Deposition in Ferritin
Conway, Vicki L	Polymer Substrates for Use in Fiber Optic Sensors: Suspension Polymerization of Kraton G1652 Modified Poly(vinylbenzyl Chloride)
Ertan-Lamontagne, Marc C	Evaluation of Polymer Coated Attenuated Total Reflectance (ATR) Elements for the Analysis of Organic Compounds In Aqueous Solution



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Gloster, Daniel F	A Study of the Synthesis of 2,2',4,4'-[4,4'-Bioxazoles]- 5,5'(4H, 4'H)-Diones, their Isomers, and the Products of Nucleophilic Ring Opening
Hill, Daniel C	Part I: Synthesis, Functionalization, and Metal Complexation of Polyamine Macrocycles Part II: Synthesis and Dynamic NMR Studies of Bicyclic Ureas
Kociolek, Martin G.	Part I: Synthesis and Study of Cyclic Sulfamates Part II: Investigation of Endocyclic Nucleophilic Substitution at Tetracoordinate Sulfur (VI)
Koza, Stephan M	The Development and Applications of a Capacitively-Coupled Microwave Induced Plasma Evolved Gas Analysis Instrument
Lin, Yuhui	Studies on Heterocyclic Compounds: Synthesis and Reactivity of 2,4-Disubstituted Bisthiazolones
Yang, Haiying	Reactions of a Dimolybdenum Cage Complex with Phosphorus and Nitrogen Nucleophiles and the Synthesis and Reactions of Heterobimetallic Cages
Yang, Xiaoke	Photoacoustic Spectroscopy and Heavy-Atom Overtone Transitions in the Near Infrared

#### Earth Science: Oceanography

Author	Dissertation Title
Benabdeljelil, Abdelkader	Wind-Driven Observation and Modelling in the Straits of Gibraltar

#### Earth Sciences

Author	Dissertation Title
Czepiel, Peter M	Radiatively Active Trace Gas Emissions from Waste Management Systems

#### Economics

Author	Dissertation Title
Jalili, Alireza R	An Inquiry into Non-Survey Techniques for Updating Input-Output Coefficients: Comparative Experiments with Data from the Soviet Union
Lacke, Jay C	Information Technology, Employee Participation and the De-Skilling Thesis
Stratopoulos, Theophanis	The Association between Arbitrage Pricing Theory Risk Measures and Traditional Accounting Variables

#### Education



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Johnson, Loren P.	Extending the National Council of Teachers of Mathematics' "Recognizing and Recording Reform in Mathematics Education" Documentation Project through Cross-Case Analyses

#### Engineering

Author	Dissertation Title
Cho, Peter C	Analysis and Design Considerations of a High-Power Density, Dual Air Gap, Axial-Field, Brushless, Permanent Magnet Motor
Liu, Zhenqiu	Experimental and Numerical Studies on Pattern Formation in Electrochemical Deposition
Schall, Paul J	The Stability of Flow over an Elastic Boundary

#### English

Author	Dissertation Title
Ballenger, Bruce P	Beyond Note Cards: Rethinking the Freshman Research Paper
Downey, Anne M	'The Art of Living': The Aesthetics of Everyday Life in Dorothy Canfield Fisher's Novels
Madden, Etta M	Bodies of Life: Shaker Literacies and Literature
Sayres, William G	The Discourse of Gratitude in the Novels of Jane Austen
Sisco, Lisa A	Emerging from the Crystalline: Isolation and Publication in Nineteenth Century Literacy Narratives

#### History

Author	Dissertation Title
Davis, Carol A	"Wherein Lies Personal Identity": The Reception of Locke and Richardson and the Language of Self in the Letters and Journals of Exceptional Eighteenth Century American Women
Saidel, Joanna M	Revisionist Zionism in America: The Campaign to Win American Public Support 1939-1948

#### Mathematics

Author	Dissertation Title
Bochert, Mark L	Extensions of Bialgebras and their Cohomological Description

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Kilic-Bahi, Semra	On the Berezin Symbol
McHugh, Michael J	Orbit-Reflexivity

#### Microbiology

Author	Dissertation Title
Fallon, Kristen Tilton	Comparison of Chlorine and Chlorine Dioxide as Disinfectants for Surface Waters

#### Natural Resources

Author	Dissertation Title
Currie, William S	Forest Floor Leachate Biogeochemistry and Decomposition Dynamics
Theisen, Arnold F	Steady-State Natural Fluorescence

#### Physics

Author	Dissertation Title
Biesecker, Douglas A	On the Occurrence of Solar Flares Observed with the Burst and Transient Source Experiment
Jayanti, Venku B	Parametric Instabilities of Alfvén Waves in the Solar Wind
Kippen, Richard	Locations and Spectra of Cosmic Gamma-Ray Bursts
Tharamel, Jathindas	Application of Asymptotic Theory in Exchange Interactions and Charge Transfer Collisions

#### Plant Biology

Author	Dissertation Title
Bastola, Dhundy R	Genetic Engineering of the Polyamine Biosynthetic Pathway and Somatic Embryogenesis in Carrot ( <i>Daucus carota</i> L.)
Coyle, Heather M	A Study of Floral Development in <i>Asparagus officinalis</i> L.
Ghoshroy, Kajal B	Chilling Photoinhibition in <i>Zea mays</i> L. and <i>Z. diploperennis</i> Ittis, Doebley, and Guzman: The Role of Oxygen and Antioxidants

#### Psychology

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Hakala, Christopher M	The Availability of Spatial Information in a Situation Model
Stevens, Alexander A	Differentiating between Delay Dependent and Delay Independent Deficits following Medial Thalamic Lesions and Prefrontal Cortical Lesions in the Rat

#### Reading & Writing Instruction

Author	Dissertation Title
Luna, Andrea D	Making a Place for Poetry: Response in an Adult Writing Group
Portalupi, Joann M	Autobiographical Understandings: the Evolution of a Teaching Self
Wilcox, Carol A	Literacy Portfolios: Considering Issues of Purpose, Power, and Potential

#### Sociology

Author	Dissertation Title
Gimpel, Holley S	The Impact on the Family of Long-Term Caregiving in the Home
Griswold, Lou Ann Sooy	Professionalization of Occupational Therapists: A Study of Emergent Identities
Olson, Linda J	The Nation-State and Its Ideology: A Study of School Children's Views of Nationalism, Politics, and Enmity
Rizzo, Elaine	The Creation of the New Hampshire State Prison for Women: Some Unintended Consequences of Legal Reform
Schwartz, Joan K.	Mainstreaming in Vocational Education: The Socio-Political Context of Including Students with Disabilities
Wauchope, Barbara A	Children Experiencing Unemployment Stress: a Comparison of Families with Stable and Unstable Employment Histories

#### Zoology

Author	Dissertation Title
Armstrong, Michael P	A Comparative Study of the Ecology of Smooth Flounder, <i>Pleuonectes putnami</i> , and Winter Flounder, <i>Pleuonectes americanus</i> , from Great Bay Estuary, New Hampshire
Berman, Jody	The Roles of Scale and Methodology in Determining the Apparent Effects of Biological Invasions

**Academic Year of Graduation: Fall 1993 to Summer 1994**

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### Animal & Nutritional Sciences

Author	Dissertation Title
Shwaery, Glenn T	Effects of 17 Beta-Estradiol on Cellular and Molecular Atherogenic Events in Animal Models

#### Biochemistry

Author	Dissertation Title
Chase, Daniel L	Characterization of Activation and Inhibitory Regions in the ADR1 Transcriptional Regulator
Coleman, Jacqueline L.	The Association Properties of Retroviral Integration Protein

#### Chemistry

Author	Dissertation Title
Barrett, James J C	Studies of Rotationally Inelastic Collisions in Ar + HF
Sun, Shujun	Kinetics and Mechanism of Iron Oxidation in Apoferritin
Sun, Xiaoyong	Coordination Chemistry of Polyphosphoxane Rings

#### Earth Science: Oceanography

Author	Dissertation Title
Bub, Frank L	The Structure of Water Mass, Salt, and Temperature Transports within Intermediate Depths of the Western Tropical Atlantic Ocean

#### Earth Sciences

Author	Dissertation Title
Frolking, Stephen E.	Modeling Soil Climate Controls on the Exchange of Trace Gases between the Terrestrial Biosphere and the Atmosphere
Nobre, Antonio D	Nitrous Oxide Emissions from Tropical Soils

#### Economics

Author	Dissertation Title
Chen, Wei H	Exports, Imports, and Technology in the U.S. Industry of Motor Vehicles and Equipment

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### Education

Author	Dissertation Title
Day, Judith E	Let Us Now Praise Famous Students: A Qualitative Study of High School Students with Learning Disabilities
Gauthier, Stacey W	Attitudes Toward Science and Science Teaching as Reflected in the Science Autobiographies of Preservice Elementary Teachers

#### Engineering

Author	Dissertation Title
Drexel, Peter G.	Physical Behavior of Computing Networks with an Emphasis on Routing
Glover, Michael A	A Massively Parallel SIMD Processor for Neural Network and Machine Vision Applications
Huang, Nai-jen	Fundamental Studies of Grafting Reactions in Free Radial Copolymerization
Miller, Heather J	Development of Instrumentation to Study the Effects of Aging on the Small Strain Behavior of Sands
Pitombeira, Ernesto D	Ground Water Flow Model for Fractured Media
Qi, Chunming	Hydrodynamics and Heat Transfer of Circulating Fluidized Bed
Yost, Joseph R	Fiber Reinforced Plastic Grids for the Structural Reinforcement of Concrete Beams
Zhang, Xishun	The Utilization of Municipal Solid Waste Combustion Bottom Ash as a Paving Material

#### English

Author	Dissertation Title
Pugh, R Michael	A Thorn in the Text: Shakerism and the Marriage Narrative
Reardon, Michael A	Becoming Visionary: Reading and Living in the Existential Mode

#### Genetics

Author	Dissertation Title
Caporale, Diane A	Genetic Variation of the Lyme Disease Spirochete, <i>Borrelia burgdorferi</i> , and Its Tick Vector, <i>Ixodes dammini</i>

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Carle, Robert B	Characterization and Inheritance of the Fused Vein Trait in Squash ( <i>Cucurbita Pepo</i> L.)
Draper, Michael P	A Functional Dissection of the Yeast CCR4 Protein and Identification of Associated Factors
Paruvangada, Vijayshri G	Genetic and Molecular Analyses of Host Symbiotic Genes and An in vitro Regeneration System for <i>cicer arietinum</i> L.

#### History

Author	Dissertation Title
Brown, Jerald E	"Settling in the World": Family Economy in Colonial New Hampshire through Samuel Lane's Diaries
Fenton, Mary A	Petitions, Protests, and Policy The Influence of the American Colonies on Quebec, 1760-1776
Madden, Ryan H.	An Enforced Odyssey: The Relocation and Internment of Aleuts During World War II
McCaffery, Robert P.	Islands of Deuschtum: German-Americans in Manchester, New Hampshire and Lawrence, Massachusetts, 1870-1942

#### Mathematics

Author	Dissertation Title
Ding, Hui R	Approximate Equivalence in von Neumann Algebras
Ionascu, Ileana	Stability Properties for the Constant of Hyperreflexivity
Kaonga, Llolsten	Decomposable Functions and Universal C*-Algebras
Narang, Deborah L	Reflexive Subspaces and Lattices of Pairs of Projections

#### Microbiology

Author	Dissertation Title
Al-Bahry, Saif N	Adherence of <i>Salmonella typhimurium</i> to Murine Peritoneal Macrophages
Gibson, Frank C	The Role of Opsonin-Independent Bacterial Adherence in the Pathogenesis of Legionnaire's Disease
Moore, Norman J	The Detection of Enteric Viruses by Nylon-Based and In Situ Nonisotopic Probe Assays and their Use in Treated and Untreated Waters



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### Natural Resources

Author	Dissertation Title
Bensel, Terrence G	Biomass Fuel Supply and Utilization in the Cities of the Developing World: A Case Study of Cebu City, Philippines
Hendricks, Joseph J.	Assessing the Effects of Nitrogen Availability on Fine Root Turnover and Tissue Chemistry in Forest Ecosystems
Martin, Mary E.	Measurements of Foliar Chemistry Using Laboratory and Airborne High Spectral Resolution Visible and Infrared Data
Norris, Gregory A.	Energy Conservation Potential Uncertainty Analysis

#### Physics

Author	Dissertation Title
Liou, Kan	Neutral Gas Plasma Interactions in Space Plasma
Lu, Chen	Study of Cross-Tail Current Carriers in Magnetotail

#### Psychology

Author	Dissertation Title
Asdigian, Nancy L	Toward an Understanding of the Cognitive Etiology of Depressive Reactions to Life Stressors: An Evaluation of the Hopelessness Theory of Depression
Blum, Mary L	Patterns of Peer Relations and Adjustment: A Longitudinal Follow-up Study
Hammond, Billy R	Macular Pigment in Monozygotic Twins
Kulp, Thomas D	Predicted Hue and Saturation for Non-Spectral Lights
Webster, Sandra L	The Rhetoric of Realism: American Psychology and American Literature, 1860-1910
Young, Heather L	The Effects of Thalamic, Frontal Cortical, and Hippocampal Formation Lesions on a Delayed Nonmatching to Sample Task

#### Reading & Writing Instruction

Author	Dissertation Title
Ferrara, Judith M.	Fourth and Fifth Grade Students as Problem Finders within the Discourse of Mediation
Qualley, Donna J	Writing and Reading as Reflexive Inquiry: A Reflexive Inquiry



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Simons, Kathe P.	Dancing on Razor Wire: Caring to Write in a Women's Prison
Wells, M C M	From Eighth Grade to High School: A Story of Enculturation and Adaptation

#### Sociology

Author	Dissertation Title
Anderson, John A	An Analysis of North Sea Oil Development and Scottish Island Youth: Postmaterialism as an Identifiable and Measurable Dimension
Cook, Kimberly J.	Punitiveness and Public Opinion on Abortion and Capital Punishment in the United States
Crepeau, Elizabeth B	Uneasy Alliances: Belief and Action on a Geropsychiatric Team
Ghidina, Marcia J	The Contemporary Work Ethic: An Exploration of Culture and Structure in Post-Industrial Society
Hammer, Christy L	A Sociological Study of the Manifestation of Multi-Culturalism in Public Schools
Sweet, Stephen A.	Work and Power in Post-Fordist Production: A Case Study of Four Machine Shops
Wichroski, Mary A	Final Vows: Organizational Dilemmas and Emergent Status-Reconstruction of the Contemporary American Nun

#### Zoology

Author	Dissertation Title
Lee, Woo-jai	The Complete Nucleotide Sequence of the Sea Lamprey ( <i>Petromyzon marinus</i> ) Mitochondrial Genome: Implications for the Evolution of Animal Mitochondrial Genome Structure and Rates of Evolution in Vertebrates
Townley, Mark A	Silk Use during Proecdysis in the Spider <i>Araneus Cavaticus</i> (Araneae, Araneidae)

### Academic Year of Graduation: Fall 1992 to Summer 1993

#### Biochemistry

Author	Dissertation Title
Cook, William J.	Regulation of the Yeast Transcriptional Activator ADR1

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Hayes, David B	Equilibrium Electrophoresis: Results from the Second Prototype
Liu, Jun	Characterization of Biglycan and Decorin Self-Association by Analytical Ultracentrifugation

#### Chemistry

Author	Dissertation Title
Bai, Mingqi	Fiber Optic Chemical Sensors Based on Polymer Swelling and Shrinking
Beauregard, John N	The Scattering of Gas Phase Molecules and Van Der Waals Clusters from Surfaces
Kirchhoff, Mary M	Mechanistic and Exploratory Organic Photochemistry and the Synthesis of Strained Cyclic Cumulenes
Mehadi, Ahmed A.	Reaction of Nickel with Soils and Goethite: Equilibrium and Kinetic Studies
Shakespeare, William C	I.Asymmetric Photochemistry II. Exploratory and Mechanistic Studies of the Triplet Sensitized Vapor Phase Photochemistry of Allenes III. Develop- ments in the Synthesis of Strained Cyclic Cumulenes
Straub, Amy E	Polymer Substrates for Fiber Optic Chemical Sensors
Zheng, Manli	Arene-Alkene Meta Photocycloadditions and Conjugated Enyne Photorearrangements

#### Earth Science: Geology

Author	Dissertation Title
Lent, Robert M	Isotope Geochemistry and Paleobiology of the Devils Lake Basin, North Dakota

#### Earth Sciences

Author	Dissertation Title
Demello, William Z	Factors Controlling Fluxes of Volatile Sulfur Compounds in Sphagnum Peatlands
Moura, Candido A	Geochronology and Geochemistry of the Basement Orthogneisses of the Araguaia Belt, Brazil
Wake, Cameron P	The Spatial Distribution of Snow and Aerosol Chemistry in the Mountains of Central Asia

#### Economics

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
James, Antoinette M	Essays in International Trade and the Environment-Applications of Heckscher-Ohlin and Non-Traditional Trade Theories

#### Education

Author	Dissertation Title
Jelmsberg, James R	Alternative Certification in New Hampshire: Perceptions of Teachers and Principals

#### Engineering

Author	Dissertation Title
Bunn, Amoret L	Techniques for Enumerating Protozoa in Saturated Subsurface Sediments
Huard, Steven R	A Nonlinear Hybrid and VR Stepping Motor Analysis via an Integrated Finite Element and Lumped Parameter Modeling Technique
Johnson, Brian L	Traces: Modeling the Teaching Consultant in a Problem Solving Domain
LeBlanc, Mark D	A Computer Model of the Role of Text Integration in the Solution of Arithmetic Word Problems
Li, Xiaoxia	Automatic Tool Path Generation for Numerically Controlled Machining of Sculptured Surfaces
Mohamed, Abdul R	Rapid Hydrolysis of Coals for Production of Liquid Hydrocarbons
Ren, Shouxian	Corrosion Protection of Metals by Poly(3-Methylthiophene) Coatings
Rudolph, Franklin J	A Neural Network Based Trajectory Planner for Redundant Systems Using Direct Inverse Modeling
Talukdar, Jaideep	Hydrodynamic Studies of the Flow of Fine Particles through a Fluidized Dense Bed of Coarse Solids

#### English

Author	Dissertation Title
Caswell, Claude E.	Red Plush and Brass: Prostitution as a Mirror of Self in the Fiction of Ernest Hemingway
Li, Xiao-Ming	A Celebration of Tradition or Self --An Ethnographic Study of Teachers' Comments on Student Writing in America and in China

#### History

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Cooper, Julianne S.	To Rend and Teare the Bodies of Men Theology and the Body in Demonic Possession France, England, and Puritan America 1550-1700

#### Mathematics

Author	Dissertation Title
Wanpen, Pachara	Hankel Operators on Hilbert Spaces

#### Microbiology

Author	Dissertation Title
Birrer, Teresa M	Analysis of Chromosomal Involvement in Yersinia Pestis Virulence Plasmid Expression
High, Andrea S	Gene-Encoded Surface Antigens of Legionella Pneumophila and their Role in Pathogenicity
Torosian, Stephen D	Insertion Sequence Elements in Yersinia: Nucleotide Sequence of IS100 of Yersinia Pestis

#### Natural Resources

Author	Dissertation Title
Skole, David L	Measurement of Deforestation in the Brazilian Amazon Using Satellite Remote Sensing

#### Physics

Author	Dissertation Title
DeAngelis, David J	A Study of Alpha Decay from the Giant Resonance Region in <sup>12</sup> C Via Inelastic Electron Scattering

#### Plant Biology

Author	Dissertation Title
Ghoshroy, Soumitra	Light Detection System in Higher Plant Chloroplasts: Pigment Mediated or Overall Photon Flux Density Related

#### Plant Science

Author	Dissertation Title
Handley, David T	Strawberry Malformation and the Tarnished Plant Bug

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Yu, Hongrun	Genetic and Morphological Variation and Differentiation of South Korean Natural Populations of Wild Soybean, <i>Glycine soja sieb. and zucc.</i>

#### Psychology

Author	Dissertation Title
Albrecht, Jason E	Accessibility of Goal Information in a Mental Model
Danig, Robin E	Intraindividual Consistencies in Psychophysical Judgment and the Psychophysical Function
Harrison, Loredana M	The Role of Thalamo-Frontocortical Mechanisms in Measures of Spatial Learning and Memory
Henn, Mark J	Social Loafing, Social Facilitation and Self-Efficacy Theory: Judgments of Control in a Group Psychokinesis Task
Jordan, Elizabeth A	Family Systems, Object Relations and Identity Formation in Late Adolescent College Women
Koger, Susan M	Thalamo-Cortical Contributions to Olfactory Non-Matching to Sample and Discrimination in the Rat
Rosenthal, Saul L	Internal Working Models of Self and Others in Adolescents: A Social-Cognitive Perspective

#### Reading & Writing Instruction

Author	Dissertation Title
Howard, Margaret V	More Than Print: The Home and School Literacies of Three Fourth-Graders
Rynkofs, John T	Culturally Responsive Talk Between A Second Grade Teacher and Hawaiian Children During Writing Workshop

#### Zoology

Author	Dissertation Title
Forrester, Graham E.	Predator-Prey Interactions Between Fish and Insects in Streams
Levin, Phillip S	A Multi-Scale Analysis of the Population Ecology of a Temperate Reef Fish
Potts-Santone, Mary S	Effects of Hematopoietic Neoplasia on Physiological Processes in the Soft-Shell Clam, <i>Mya arenaria</i> (LINNE.)
Tugmon, Cathy R	The Characterization of the Orb Web of <i>Argiope Aurantia</i> (Araneidae Araneae) with Emphasis on the Major Ampullate Silk

# UNH Graduate School

## Doctoral Dissertations from Fall, 1990 to Present

### Academic Year of Graduation: Fall 1991 to Summer 1992

#### Biochemistry

Author	Dissertation Title
Bobola, Michael S.	Molecular Variation in <i>Picea Rubens</i> and <i>Picea Mariana</i>

#### Botany

Author	Dissertation Title
Noh, Eun W.	Modulation of Polyamine Metabolism in Plants by Transfer of a Human Gene for S-Adenosylmethionine Decarboxylase
Smith, Cheryl A.	Comparative Studies on the Components of Innate Partial Resistance to <i>Venturia Inaequalis</i> (Cke.) Wint. in Nine Apple Cultivars

#### Chemistry

Author	Dissertation Title
Qi, Fang Fang	Interactive, User-Directed, Computer-Assisted HPLC Methods Development

#### Economics

Author	Dissertation Title
Aliouche, El-Hachemi	Money, Income, and Causality: An Open Economy Reexamination
Ertan-Lamontagne, Ozlem	IMF-Supported Programs in Developing Countries and their Impact on Vulnerable Groups: The Case of Turkey after 1980
Mitchell, Eric P	Financial and Environmental Behavior of the Regulated Firm: A Case Study of the U.S. Nuclear Power Industry, 1974-1984

#### Engineering

Author	Dissertation Title
Latham, Paul W	A Simulation Study of Bipedal Walking Robots: Modeling, Walking Algorithms, and Neural Network Control
Murdeswar, Nikhil M	A Transmission Electron Microscopy Study of Defect Generation and Microstructure Development in Ultrasonic Wire Bonding
Rucinska, Barbara D.	Semistate Systems and the Continuation Method



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Schmeckpeper, Edwin R	Performance of Concrete Beams and Slabs Reinforced with FRP Grids
Segee, Bruce E	Characterizing and Improving the Fault Tolerance of Artificial Neural Networks

#### English

Author	Dissertation Title
Felker, Christopher D	Cotton Mather's Magnalia Christi Americana and Rehearsed Spectacles of New England History, 1820-1862
Spangler, Luita D.	On Her Mouth You Kiss Your Own: Lesbian Conversations in Exile, 1924-1936

#### Genetics

Author	Dissertation Title
Rasmussen, Karen E	Genetic, Physiological, and Anatomical Analyses of a Wilty Mutant of Tomato ( <i>Lycopersicon esculentum</i> Mill., CV. Large Plum)

#### History

Author	Dissertation Title
Dodge, Timothy D	Crime and Punishment in New Hampshire, 1812-1914
McCarron, Edward T	The World of Kavanagh and Cottril: A Portrait of Irish Emigration, Entrepreneurship, and Ethnic Diversity in Mid-Maine, 1760-1820
Shea, Preston T	The Rhetoric of Authority in the New-England Courant

#### Mathematics

Author	Dissertation Title
Kirtland, Joseph	Finite Groups as a Generalization of Vector Spaces through the Use of Splitting Systems

#### Mathematics Education

Author	Dissertation Title
Rector, Judy A	Beliefs, Autonomy, and Mathematical Knowledge

## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

#### Microbiology

Author	Dissertation Title
Ross, Robin A	Metabolic and Morphological Differentiation in <i>Escherichia coli</i> and <i>Clostridium beijerinckii</i>
Sloan, Anne R	The Role of Lipoteichoic Acid and Leukocyte Integrins in the Binding of Group B Streptococci to Murine Peritoneal Macrophages

#### Physics

Author	Dissertation Title
Bates, John E.	Order, Chaos, and Complexity in Discrete Dynamical Systems
Leuschner, Mark B	Nuclear Structure Studies of the $^{16}\text{O}$ Nucleus Observed with the Quasielastic ( $e, e'p$ ) Reaction
Lynch, Kristina A	Fine Structure of Auroral Particle Acceleration
Popecki, Mark A	A Statistical Study of Narrow Bandwidth, High Latitude Geomagnetic Pulsations
Xu, Peng	Solar Flares: The Onset of Magnetic Reconnection and the Structure of Radiative Slow-Mode Shocks
Yang, Guang	Resonance Absorption of MHD Surface Waves with Applications to the Solar Atmosphere

#### Psychology

Author	Dissertation Title
Aparicio, Carlos F	Comparing Natural Travel with Artificial Travel Requirements in the Study of Foraging in the Laboratory
Blodgett, Robert W	Values and Preventive Health Behavior: Assessment Using the Rokeach Value Survey, Response Time, and Certainty Ratings
Buchanan, Trey M	A Comparison of Methods for Analyzing Intraindividual Change in Student Epistemological Orientation During the Transition to College

#### Reading & Writing Instruction

Author	Dissertation Title
Fu, Danling	A Study of the Reading and Writing Experiences of Four Laotian Refugee Adolescents from One Family in an American Secondary School
Matthews, Cindy	Someone Shot the Rainbow: Emergent Writing Patterns of Securely and Insecurely Attached Inner-City First Graders



## UNH Graduate School

### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Murray, Margaret L.	An Ecological Perspective of Writing: Teachers, Peers, and Authors as Resources in a Response-Based Classroom

#### Sociology

Author	Dissertation Title
King, David F	Social Support, Psychological Distress and the Consequences of Psychotherapeutic Intervention

#### Zoology

Author	Dissertation Title
Langan, Richard J	Discards of Commercial Fish Species in the Gulf of Maine Groundfish and Shrimp Fisheries
Packard, Anne Turner	Horizontal Distribution, Feeding Rates and Prey Selectivity of the Littoral Predator, <i>Polyphemus pediculus</i>
Xiong, Bai	Intraspecific Variability and Phylogeny of Sibling Species of <i>Simulium Venustum</i> and <i>S. Verecundum</i> Complexes (Diptera: Simuliidae) Revealed by the Sequence of the Mitochondrial Large (16S) Ribosomal RNA Gene

### Academic Year of Graduation: Fall 1990 to Summer 1991

#### Biochemistry

Author	Dissertation Title
Olsen, Philip H	The Effect of Ca <sup>2+</sup> on the Interaction of Protein C with Thrombin and the Elastase Fragment of Thrombomodulin. Analysis by Analytical Ultracentrifugation.

#### Botany

Author	Dissertation Title
Descenzo, Richard A	Expression of the Murine Ornithine Decarboxylase Gene in Transgenic <i>Nicotiana Tabacum</i> var. Xanthi
Guo, Zhanyang	Environmental and Biological Factors Affecting Tissue Composition of Marine Macrophytes

#### Chemistry

Author	Dissertation Title
Wythoff, Barry J	Development and Application of Artificial Intelligence Strategies to Solve Infrared Spectroscopic Problems



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#### Economics

Author	Dissertation Title
Nahavandi, Jamal	Re-Examination of the Purchasing Power Parity Theory: A Two Sector Model Approach

#### Engineering

Author	Dissertation Title
An, Pak-Cheung E.	An Improved Multi-Dimensional CMAC Neural Network: Receptive Field Function and Placement
Findlay, R Craig	Use of the 9-Arm Self-Boring Pressuremeter to Measure Horizontal in situ Stress, Stress Anisotropy, and Stress-Strain Behavior in Soft Clay
Fu, Wen-Rong	Computational Study of Red Blood Cell Distribution in Simple Networks
Lizotte, Donna L	Evaluation of a Single Artery-Single Junction Model for Detecting Atherosclerotic Plaques from Blood Pressure Waveforms
Prina, Steven R	The Analysis and Design of Brushless DC Motors
Tsai, Kun-Yung	Local Heat Transfer to Surfaces Immersed in the Freeboard Region of a Fluidized Bed
Vorosmarty, Charles J	Models of Macro-Scale Hydrology for Use in Global Change Research: Tests on Two Tropical River Systems

#### English

Author	Dissertation Title
Ahlstrom, Amber D	Reflects Actions: Theory and Practice in Teaching Writing
Tobin, Laurence R	Writing Relationships: Reading Students, Reading Ourselves

#### Genetics

Author	Dissertation Title
Malvar, Thomas M	Structural and Functional Characterization of the Yeast General Transcriptional Activator CCR4

#### History

Author	Dissertation Title
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### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Gustke, Nancy Shuman	The Special Artist in American Culture: A Biography of Frank Hamilton Taylor (1846-1927)
Trufant, Laurel Warren	Metaphors in the Construction of Theory: Ramus, Peirce, and the American Mind

#### Mathematics

Author	Dissertation Title
Sawyer, Laurie J	Distance Function Constructions in Topological Spaces

#### Microbiology

Author	Dissertation Title
Birrer, Gregory A	Genetic Transformation of Industrial Species of Bacillus and Clostridium
Eden, Peter A	Molecular Phylogenetic Analysis of Magnetotactic Prokaryotes

#### Natural Resources

Author	Dissertation Title
McNulty, Steven G	Nutrient Cycling in New England Spruce-Fir Forests

#### Physics

Author	Dissertation Title
Garbe, Gregory P.	A Study of Ion Acceleration at Rocket Altitudes and Development and Calibration of Pitch Angle Imaging Charged Particle Detectors

#### Plant Science

Author	Dissertation Title
Crispi, Mark L	Gametophytic Selection for Early Maturity in Tomato ( <i>Lycopersicon Esculentum</i> Mill.)

#### Psychology

Author	Dissertation Title
Arlinghaus, Mae N	Motivational and Cognitive Components of Self Presentation in Humor and Embarrassment: A Multi-Measure Approach



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### Doctoral Dissertations from Fall, 1990 to Present

Author	Dissertation Title
Fleming, Kevin K	When Dough is a Female Deer: The Role of Homophony in Lexical Priming
Metzger, Jeffrey L	The Effect of Objective Self-Awareness on Judgments of Noncontingent Act-Outcome Relations
Pertsch, Linda J	The Relationship Between Mood and the Relative Accessibility of Affectively Latent Cognitive Structures: Testing the Mood-Congruent Priming Hypothesis
Robinson, John K	Neuropathology and Behavioral Impairments Following Pyriithiamine-Induced Thiamine Deficiency: Protective Effects of Glutamate Antagonist MK-801
Sparrow, John E	Stimulus Configuration and the Perceived Rigidity of Eight-Vertex Polyhedra

#### Reading & Writing Instruction

Author	Dissertation Title
Petersen, Meg Gozalez	Vivencias: Writing as a Way into a New Language and Culture
Romano, Thomas S	One Writing Process: A Self-Reflective Analysis of the Creation of a Young Adult Novel
Simmons, Jay W	Large-Scale Portfolio Evaluation of Writing
Sunstein, Bonnie S	Summer Revisions: An Ethnographic Study of High School Teachers in the Culture of a Summer Writing Program
Vibert, Ann B.	Breaking the Rules: Teaching and Learning Writing in the High School

#### Sociology

Author	Dissertation Title
Alvarez, Alexander	Justifiable Homicide
Carmody, Dianne C	Parental Abductions in the Context of Legal, Familial, Social and Cultural Variables
Plass, Margaret S	Homicide in Black Families: A Quantitative Analysis of Trends and Patterns in the United States
Shigo, Albert A.	The Impact of Systematic Family Processes and Structures on Mental Illness and Family Violence
Ward, Steven C	Postmodernism as the Socio-Cultural Deconstruction of Modernity