

NESDB 2014 PROGRAM

FRIDAY APRIL 11TH

SESSION I: 1:00-6:15

1:00-1:15 **WELCOME AND INTRODUCTORY REMARKS BY VALENTINA GRECO AND CLARISSA HENRY**

WELCOME ADDRESS BY VIVIAN IRISH (SDB PAST-PRESIDENT)

CHAIR: MARY DONOHOE

1:15-1:35 **SCOTT WEATHERBEE (YALE) : USING FORWARD GENETICS TO IDENTIFY DEVELOPMENTAL GENES**

1:35-1:50 JESSICA GRAY (HARVARD) : *EVOLUTION OF MIRNA SIGNALING IN DEVELOPMENT: INSIGHTS FROM THE HEMICHORDATE SACCOGLOSSUS KOWALEVSKII*

1:50-2:05 LAURA LOWERY (BOSTON COLLEGE) : *GROWTH CONE-SPECIFIC FUNCTIONS OF MT POLYMERASE XMAP215 IN RESTRICTING MT DYNAMICS AND PROMOTING AXON OUTGROWTH*

2:05-2:20 VAIBHAV PAI (TUFTS) : *ENDOGENOUS GRADIENTS OF RESTING POTENTIAL INSTRUCTIVELY PATTERN NEURAL TISSUE VIA NOTCH SIGNALING AND REGULATION OF PROLIFERATION*

2:20-2:50 COFFEE BREAK

CHAIR: ALICIA EBERT

2:50-2:55 ABOUT SDB BY JOEL SMITH (MBL, SDB JR FACULTY REP)

2:55-3:15 **LIONEL CHRISTIAEN (NYU): TRANSCRIPTIONAL CONTROL OF CELL FATE SPECIFICATION IN THE ASCIDIAN CARDIOPHARYNGEAL MESODERM**

3:15-3:30 VALERIA YARTSEVA (YALE) : *CHARACTERIZATION OF MRNA CLEARANCE DURING THE MATERNAL-TO-ZYGOTIC TRANSITION*

3:30-4:05 FAST TRACK: CHARLES NELSON (UMASS), DENISE ZANNINO (AMHERST), SPENCER MASS (SUNY); JAMES GAGNON (HARVARD), KIMBERLEY JOHNSON (SMITH), HELEN COUSIN (UMASSAMHERST) DANIEL MCINTYRE (NYU)
NOTE: POSTERS 1-7 AUTHORS

4:05-4:35 COFFEE BREAK

CHAIR: KAI MESA

4:35-4:55 **MARY BAYLIES (SLOAN-KETTERING) : MOTORS, ADAPTORS AND SIGNALING DRIVE MYONUCLEAR POSITIONING AND MUSCLE FUNCTION**

4:55-5:10 AKASH SRIVASTAVA (MBL) : *DIFFERENTIAL ROLES OF BETA-CATENIN INHIBITOR CHIBBY1 IN PANCREAS DEVELOPMENT AND TRANSDIFFERENTIATION OF LIVER TO PANCREAS*

KEYNOTE ADDRESS: 5:15-6:15 - ANDREAS JENNY INTRODUCTION

SPYROS ARTAVANIS-TSAKONAS (HARVARD): *THE NOTCH SIGNALING SYSTEM: PARADIGM FOR COMPLEXITY*

DINNER: 6:30-7:45

POSTER SESSION AND MIXER: 8:00-10:00 (AUTHORS 1-43 NUMBERED POSTERS PRESENT)

SATURDAY APRIL 12TH

BREAKFAST: 7:00-8:30

SESSION II: 9:00-12:00

CHAIR: CRAIG MAGIE

9:00-9:20 **HERMANN STELLER (ROCKEFELLER) : *REGULATION OF STEM CELL NUMBER BY APOPTOSIS***

9:20-9:35 **KAREN ALIM (HARVARD) : *ADAPTION OF FLUID FLOW IN THE SLIME MOLD PHYSARUM POLYCEPHALUM***

9:35-9:50 **ELIZABETH DESCHENE JACOX (YALE) : *BETA-CATENIN ACTIVATION REGULATES TISSUE GROWTH VIA A NON-CELL AUTONOMOUS MECHANISM WITHIN THE HAIR STEM CELL NICHE***

9:50-10:05 **YUSUFF ABDU (NYU) : *CELLULAR MORPHOGENESIS OF C. ELEGANS GERM CELLS THROUGH ENDODERM-ASSISTED CANNIBALISM***

10:05-10:30 COFFEE BREAK – SPONSORED BY RAINBOWGENE

CHAIR: DUSTIN UPDIKE

10:30-10:50 **SUSAN MANGO (HARVARD) : *DYNAMIC CHROMATIN DURING PLURIPOTENCY AND DIFFERENTIATION***

10:50-11:05 **CELINA JULIANO (YALE) : *PIWI-PIRNA PATHWAY FUNCTION IN THE STEM CELLS OF IMMORTAL HYDRA***

11:05-11:20 **MATTHEW DUNN (SUNY STONY BROOK) : *IDENTIFYING STEM CELLS IN THE SEA ANEMONE NEMATOSTELLA VECTENSIS***

11:20-11:35 **ANTOINE BORENSZTEJN (BROWN) : *CONTROL OF BOTH CELL MAINTENANCE AND CELL MIGRATION DURING DROSOPHILA OOGENESIS BY JAK/STAT AND BMP SIGNALING***

11:35-11:55 **CASSANDRA EXTAVOUR (HARVARD) : *FROM EGG TO IMMORTALITY: THE EVOLUTION OF THE GERM LINE***

LUNCH: 12:00-1:00 OUTREACH TABLES HAVE BEEN ORGANIZED FOR SPEAKERS TO INTERACT WITH UNDERGRADUATE CLASS AND HIGH SCHOOL STUDENTS.

SESSION III: 1:00-5:00

CHAIR: CAROLINE BURNS

1:00-1:20 ANNA-KAT HADJANTONAKIS (SLOAN-KETTERING) : CELL FATE CHOICE IN THE MOUSE BLASTOCYST: THE EMERGENCE OF PLURIPOTENCY.

1:20-1:35 TONY JOUDI (BOSTON UNIVERSITY) : *CHARACTERIZING ENDOCYTOSIS IN DYING EGG CHAMBERS OF DROSOPHILA MELANOGASTER*

1:35-1:50 LEILA JAHANGIRI (HARVARD): *THE AP-1 TRANSCRIPTION FACTOR COMPONENT FOSL2 POTENTIATES MYOCARDIAL DIFFERENTIATION FROM THE ZEBRAFISH SECOND HEART FIELD*

1:50-2:10 WHITNEY HABLE (UMASS DARTMOUTH) : POLYCHLORINATED BIPHENYLS DISRUPT EMBRYOGENESIS IN INTERTIDAL MARINE ALGAE

2:10-2:30 COFFEE BREAK – SPONSORED BY NIGHTSEE

CHAIR: CHRISTOPHER WYLIE

2:30-2:50 MIKE BARRESI (SMITH) : DIVIDE AND CONQUER NEUROGENESIS: A KINESIN MOTOR POWERS NEURAL STEM CELL DIVISION IN THE ZEBRAFISH NEURAL TUBE.

2:50-3:05 CHITRA DAHIA (HOSPITAL FOR SPECIAL SURGERY) : *WNT AND SHH SIGNALING ARE KEY PATHWAYS REGULATING POSTNATAL MOUSE DISC DEVELOPMENT AND AGING*

3:05-3:20 KATHERINE ROGERS (HARVARD) : *A LATE REQUIREMENT FOR LEFTY-MEDIATED NODAL INHIBITION*

3:20-3:40 KATE LEWIS (SYRACUSE) : INTERNEURON SPECIFICATION IN THE ZEBRAFISH SPINAL CORD

3:40-4:10 COFFEE BREAK

EDUCATION SESSION: 4:10-5:10 - MICHELLE SMITH

KEYNOTE ADDRESS: 5:15-6:15 - KIM TREMBLAY INTRODUCTION

SUE ACKERMAN (JACKSON LABS) : MULTICOPY RNA GENES AND THEIR ROLE IN THE CNS

DINNER: 6:30-7:45

POSTER SESSION AND MIXER: 8:00-10:00 (AUTHORS OF 44-86 NUMBERED POSTERS PRESENT)

SUNDAY APRIL 13TH

BREAKFAST: 7:00-8:30

SESSION IV: 9:00-12:00

CHAIR: BRYAN CRAWFORD

9:00-9:20 **HANNES BUELOW (EINSTEIN) : SHAPING SENSORY DENDRITES – SKIN-DERIVED CUES DO THE JOB.**

9:20-9:35 **ETHAN DAVID COHEN (ROCHESTER) : COOPERATIVE WNT5A/WNT11 SIGNALING INHIBITS CANONICAL WNT SIGNALING AND PROMOTES CARDIAC PROGENITOR FATE VIA THE CASPASE-DEPENDENT DEGRADATION OF AKT**

9:35-9:50 **BENJAMIN MARTIN (SUNY STONY BROOK) : POST-GASTRULATION MESODERMAL PATTERNING**

9:50-10:10 **MAGDALENA BENZANILLA (UMASS AMHERST) : STEERING PLANT CELL DIVISION**

10:10-10:40 COFFEE BREAK

CHAIR: ETHAN DAVID COHEN

10:40-10:55 **ADAM MARTIN (MIT) : COLLECTIVE CELL BEHAVIOR PROMOTES EPITHELIAL INVAGINATION**

10:55-11:10 **RUTH JOHNSON (WESLEYAN) : THE ADAPTOR PROTEIN CINDR FINE-TUNES JNK SIGNALING IN DEVELOPING EPITHELIA**

11:10-11:30 **BUSINESS MEETING**

POSTER AWARDS: 11:30-11:45

BOXED LUNCH: 12:00