

47 (Room Diamond) Cladistics/Phylogenetic Analysis

Chair: A. Schulze

- 08:20 47.1** CLAMP, J.C.; The phylogenetic position of *Lagenophrys* (Protista, Ciliophora, Peritricha) inferred from the sequence of the gene for 18S small subunit rRNA
08:40 47.2 (DIZ) SCHULZE, A, CUTLER, E.B., GIRIBET, G.; Molecular and Morphological Evolution in Sipunculan Worms
09:00 47.3 (DSEB) MOTT, TAMI; Molecular Systematics of Brazilian amphisbaenids (Reptilia, Squamata, Amphisbaenidae)
09:20 47.4 ZHONG, M., HALANYCH, K. M. ; Mitochondrial Genomes of Three Terebelliformia Annelids
09:40 47.5 (DSEB) MOOI, R., PIMENTEL, F.; From large to small to large: Phylogenetic systematics of rotulid sand dollars and their tiny relatives

48 (Room Diamond) Development: Invertebrate Evolution and Development

Chair: D. Munson

- 10:20 48.1 (DEDB)** DUNN, CW, WAGNER, GP; The evolution and development of colony-level organization in the Siphonophora (Cnidaria, Hydrozoa)
10:40 48.2 (DEDB) MATUS, DQ, PANG, K, THOMSEN, GH, MARTINDALE, MQ; Signaling pathway complexity in the development of an anthozoan cnidarian
11:00 48.3 (DEDB) IRVINE, Steven Q; Genomic regulation of the *Dll-A/B* gene cluster in *Ciona intestinalis*.
11:20 48.4 (DEDB) RYCHEL, A.L., SWALLA, B.J.; Evolution of Pharyngeal Gill Bars in the Deuterostomes

49 (Room Sapphire) Digestion and Excretion: Comparative Digestive Strategies in Flying Endotherms

Chair: C. R. Tracy

- 08:00 49.1 (DCPB)** LAVIN, S.R., MCWHORTER, T.J., KARASOV, W.H.; Differences in paracellular absorption: a function of solvent drag or pore size?
08:20 49.2 (DCPB) MCWHORTER, T.J., HARTMAN BAKKEN, B., KARASOV, W.H., MARTINEZ DEL RIO, C.; Hummingbirds fuel high metabolism with both paracellular and carrier-mediated intestinal glucose absorption
08:40 49.3 (DCPB) WELCH, KC, BAKKEN, BH, SUAREZ, RK; Use of Dietary Sugar by Hummingbirds as Revealed by Stable Isotope and Respiratory Analysis
09:00 49.4 (DCPB) PODLESAK, D. W., MCWILLIAMS, S. R.; Birds metabolically route exogenous nutrients to rebuild digestive organs after fasting
09:20 49.5 (DCPB) TRACY, C.R., WOJCIECHOWSKI, M.S., MCWHORTER, T.J., YOSEF, R., KARASOV,

- 08:40 51.3 (DEE)** ERWIN, P. M., THACKER, R. W.; Incidence and Importance of Photosynthetic Symbionts in Shallow-Water Sponge Communities
09:00 51.4 (DIZ) COWART, J.D.*, PAWLIK, J.R; Is there a trade-off between reproduction and growth form for two closely related Florida reef sponges?
09:20 51.5 (DEE) GOFFREDO, S., LASKER, H.R.; Modular Growth of a Gorgonian Coral Generates Predictable Patterns of Colony And Population Growth
09:40 51.6 (DIZ) LAPID, E., CHADWICK, N. E. ; Coral sweeper tentacles as probes to remotely detect competitors
10:20 51.7 (DEE) LEICHTER, J.J., HELMUTH, B., FISCHER, A.M.; What lies beneath the surface: quantifying complex thermal environments on corals reefs
10:40 51.8 (DCE) TARRANT, A.M., CORTÉS, J., BEZY, B, JOHANNING, K.J., CHIANG, T.C., VARGAS, J.A.; Identification and expression patterns of nuclear receptors in the coral *Pocillopora damicornis*
11:00 51.9 (DAB) TRESPALACIOS, D., BEULIG, A.; Coral Luminescent Banding as Environmental Indicator in Bocas del Toro, Panama
11:20 51.10 (DIZ) QUINN, NJ, KOJIS, BL; Assessing Enhancement Techniques to Increase *Acropora cervicornis* Populations and Increase Fish Biodiversity in Jamaica
11:40 51.11 (DEE) BASCH, L.V.; Marine Conservation Science: Examples in a Network of National Parks and Marine Protected Areas in Hawaii

52 (Room Scotland C) Comparative Evolutionary Morphology I

Co-chairs: D. Hulsey & E. Hoffman (10:30 am)

- 08:00 52.1 (DSEB)** HILL, R.I.; Morphology and locomotor mimicry in ithomiine butterflies (Nymphalidae)
08:20 52.2 (DVM) MCELROY, EJ, REILLY, SM; The evolutionary relationship between foraging mode and locomotor functional morphology in lizards
08:40 52.3 (DVM) COLLAR, D.C.*; Testing the bass fishermans hypothesis: Does reaching an adaptive peak limit diversification of the feeding apparatus in *Micropterus* (Teleostei: Centrarchidae)?
09:00 52.4 (DCPB) PAPANASTATIIOU, Yannis P., LOWE, Christopher G., HOLLAND, Kim N.; Variations in the response of gastric acid secretion during periods of fasting between shark species
09:20 52.5 (DVM) HULSEY, CD, STREELMAN, JT; Cichlid Pharyngeal Jaw Fusion: Is Suturing the Key to Unparalleled Trophic Divergence?
10:00 52.6 TODT, C., TYLER, S.; Comparative studies on the pharynx simplex of Acoela
10:20 52.7 (DIZ) SWEENEY, A., DES MARAIS, D.L.,

W.H., PINSHOW, B.; Carbohydrate absorption in migrating blackcaps, upon arrival and after refeeding, at a stopover in southern Israel

09:40 49.6 (DCPB) TRACY, C.R., MCWHORTER, T.J., KORINE, C., PINSHOW, B., KARASOV, W.H.; A mystery solved: how the Egyptian fruit bat absorbs sugar

50 (Room Sapphire) Digestion and Excretion: Effects of Feeding and Digestion on Metabolism

Chair: S. Secor

10:20 50.1 ROARK, Alison M., BJORN DAL, Karen A.; Experimentally imposed patterns of food availability and their effects on metabolic rate in Indian stick insects,

Carausius morosus

10:40 50.2 (DIZ) CURTIS, D.L.*, MCGAW, I.J.; Feeding and digestion in response to low salinity in the Dungeness crab, *Cancer magister*

11:00 50.3 (DEE) HERNANDEZ, R/A, SECOR, S/M, ESPINOZA, R/E; Is a dietary jack of all trades a master of none? Adaptability of gut form and function in an omnivorous lizard.

11:20 50.4 (DCPB) BRITT, E.J., HICKS, J.W., BENNETT, A.F.; The energetic consequences of prey specialist and generalist populations of three species of garter snake (*Thamnophis elegans*, *T. couchii* and *T. ordinoides*).

11:40 50.5 (DCPB) OTT, BD, SECOR, SM; Postprandial Upregulation of Intestinal Morphology and Function in *Python*

51 (Room Scotland A) Coral Reef Biology

Co-chairs: N. Chadwick & V. Weis

08:00 51.1 (DEE) RODRIGUEZ-LANETTY, Mauricio, WEIS, Virginia M, PHILLIPS, Wendy S; Transcriptome analysis of a cnidarian dinoflagellate mutualism reveals complex modulation of host gene expression

08:20 51.2 (DCPB) BERTIN, M.J., POMPONI, S.A., ELLINGTON, W.R.; Creatine and Arginine Kinases are Widespread in the Porifera

BAN, A., JOHNSEN, S.; Evolving Refractive Index: How Lens Protein Evolution Contributed to High-Resolution Squid Vision

10:40 52.8 (DEE) SISON-MANGUS, MP, BRISCOE, AD; Evolutionary origin of a blue opsin gene duplication in lycaenid butterflies

11:00 52.9 HOFFMAN, Eric A., GOODISMAN, Michael A. D.; Genomic analysis of caste differentiation in yellowjacket wasps

11:20 52.10 MAHLER, L., KEARNEY, M.; The Palatal Dentition in Squamate Reptiles: Morphology, Development, Attachment, and Replacement

11:40 52.11 EVANS, A.R., WILSON, G.P., JERNVALL, J., FORTELIUS, M.; New methods in 3D tooth shape analysis: a study of form and function in murine and sigmodontine rodents

53 (Room Scotland B) Regulatory Biology: Comparative Endocrinology

Chair: D. Buchholz

08:20 53.1 (DCE) MCCORMICK, Stephen D., O'DEA, Michael F., MOECKEL, Amy M.; Are we missing a mineralocorticoid in fish? Effect of corticoids and receptor inhibitors on salinity tolerance of Atlantic salmon.

08:40 53.2 (DCE) NORBECK, L., KITTILSON, J., SHERIDAN, M.A.; Nutritional Regulation of the Somatotropic Axis of Rainbow Trout (*Oncorhynchus mykiss*).

09:00 53.3 (DCE) MOORE, Brandon C, COOK, Robert W, CHUNG, Koo Whang, ALVERS, Ashley L, WOODRUFF, Teresa K, GUILLETTE, Louis J; Ovarian Response to Gonadotropin in Alligator Neonates

09:20 53.4 SEABURY SPRAGUE, R.*, BREUNER, C.W.; Timing of fledging, body condition, and corticosteroid binding globulin in Laysan Albatross

- 09:40 53.5 (DCE)** SILVER, M.R., SOWER, S.A.; Characterization of an ancestral type II GnRH receptor: function and pharmacological profile of the sea lamprey GnRH receptor
- 10:20 53.6 (DCE)** BUCHHOLZ, D.R., PAUL, B.P., SHI, Y.-B.; Gene-specific changes in promoter occupancy by thyroid hormone receptor during frog metamorphosis: Implications for developmental gene regulation
- 10:40 53.7 (DVM)** SERRAT, M.A., LOVEJOY, C.O., KING, D.; Age- and site-specific decline in IGF-I receptor expression and growth plate activity in the mouse hindlimb
- 11:00 53.8 (DCPB)** HYNDMAN, K/A, EVANS, D/H; Endothelin receptors in the killifish, *Fundulus heteroclitus*, gill
- 11:20 53.9** CHRISTIANS, Julian K, HOEFLICH, Andreas, KEIGHTLEY, Peter D; Investigation of the causal gene underlying a quantitative trait locus (QTL) contributing to genetic variation in growth
- 11:40 53.10 (DCE)** KAJIMURA, S., AIDA, K., DUAN, C.; Understanding hypoxia-induced gene expression in early development: In vitro and in vivo analysis of HIF-1-regulated zebrafish IGF1P-1 gene expression

54 (Room Ireland A) Bone Form

Co-chairs: D. Frod & S. Reese

- 08:00 54.1 (DVM)** DEVLIN, Maureen, LIEBERMAN, Daniel, LEDOUX, Nicole; Estradiol, strain, and periosteal bone growth
- 08:20 54.2 (DVM)** DUMONT, E.R., GROSSE, I.R., COLETTA, C.E.; Applying muscle forces to finite element models of bone: How much modeling precision is necessary?
- 08:40 54.3 (DEE)** FORD, D.K., HOLLIDAY, C.M.; An investigation into the effects of PCB 126 on bone density in turtles
- 09:00 54.4 (DVM)** HORTON, Jaquan M., RANCHES, Gregory, SUMMERS, Adam P.; The morphology, mechanical properties, and composition of the acellular ribs in a teleost fish *Myoxocephalus polyacanthocephalus*.
- 09:20 54.5 (DEDB)** RENO, P.L., MCBURNEY, D.L., LOVEJOY, C.O., HORTON, W.E.; Comparative analysis of mouse metatarsal ossification and implications for differential skeletal growth
- 09:40 54.6** VANDEN BROOKS, J.M.; The development of *Alligator mississippiensis* under varying pO_2
- 10:20 54.7 (DCPB)** REESE, Scott A., MOORE, Douglas, ULTSCH, Gordon R., WARREN, Daniel E., JACKSON, Donald C.; Mechanical characteristics of bone change little during anoxic submergence at 3 °C in red-eared slider turtles, *Trachemys scripta*.
- 10:40 54.8 (DEDB)** ZELDITCH, ML, MYERS, P,

- 10:40 56.2 (DCPB)** VOGEL, S; Bioballistics: The Scaling of Prelaunch Acceleration and Subsequent Trajectories
- 11:00 56.3** MONEY, N. P., PRINGLE, A., PATEK, S. N., FISCHER, M., STOLZE, J.; Rapid Discharge of Mushroom Spores
- 11:20 56.4 (DVM)** ESSNER, R.L., NAUWELAERTS, S., ROME, L.C.; Forelimb and caudopelvic function during takeoff in *Rana pipiens*
- 11:40 56.5 (DVM)** JACKSON, B.E., DIAL, K.P.; Allometry of avian flight performance: contribution of legs and wings during maximal burst takeoff and vertical flight

57 (Room Ireland C) Physical Biology and Ecomorphology

Co-chairs: F. Thomas & S. Johnsen

- 08:20 57.1** THOMAS, F.I.M., BADGLEY, B.D., YUND, P.O., GRABOWSKI, R.C.; Linking field measurements of hydrodynamic conditions to the fertilization of the green sea urchin *Strongylocentrotus droebachiensis*
- 08:40 57.2** BADGLEY, BD, THOMAS, FIM, YUND, PO; The effects of hydrodynamics on fertilization success in the green sea urchin, *Strongylocentrotus droebachiensis*.
- 09:00 57.3 (DIZ)** VON DASSOW, M; Influences of flow and feeding on colony organization in a bryozoan
- 09:20 57.4** AVENI-DEFORGE, Kyle, WETHEY, David S; *Fortuna dubia*: Byssal function in marine mussel adaptation to seasonal changes in wave energy
- 09:40 57.5 (DIZ)** WOLCOTT, TG, WOLCOTT, DL, KAMYKOWSKI, D, WATERS, L; Plankton mimicry: fake dinoflagellates to help understand real red tides.
- 10:20 57.6 (DVM)** HILLENIUS, Willem/J, MADERSON, Paul/F; DOES PITH STRETCH A FEATHER? Does pith stretch a feather?
- 10:40 57.7 (DCPB)** JOHNSEN, S., KELBER, A., WARRANT, E.J., SWEENEY, A.M., WIDDER, E.A., LEE, R.L.; The color of night: twilight and nocturnal illumination and its effects on color perception
- 11:00 57.8** KINANE, S., THOMAS, F.I.M.; Bleaching in the coral *Porites divaricata*: effects of temperature, light, and water motion
- 11:20 57.9 (DEE)** SCHNEIDER, KR, HELMUTH, BST; The effect of intertidal thermal environments on survival and growth: a comparison between an invasive and native mussel species

58 (Room Diamond) Biogeography and Biodiversity

Co-chairs: J. Williams & D. Wethey

- 13:00 58.1** WILLIAMS, J. D.*, MCDERMOTT, J. J., BOYKO, C. B.; A world-wide review of hermit crab parasites
- 13:20 58.2 (DEE)** WETHEY, DS, GILMAN, SE,

LUNDRIGAN, BL; Dietary consistency and the canalization of skull growth
11:00 54.9 (DVM) ESPINOZA, N.R.*, CIRILO, S.R., HILL, S., BLOB, R.W.; Limb Bone Strain in Jumping Frogs
11:20 54.10 (DVM) YOUNG, JW, FERNANDEZ, D; Ontogeny of limb bone geometry and bone strength in an arboreal primate (*Cebus albifrons*)
11:40 54.11 (DVM) JACINTO, RD, NAGLE, L, PATEK, SN, SUMMERS, AP; Keeping an open mind: investigating poacher skeletal morphology

55 (Room Ireland B) Hydrodynamics - Locomotion I

Co-chairs: F. Fish & B. Chadwell

08:00 55.1 (DVM) CHADWELL, BA*, STANDEN, EM, LAUDER, GV; Dorsal and anal fin function during the C-start escape response in bluegill sunfish.
08:20 55.2 (DVM) TYTELL, E.D.; Median fin function in bluegill sunfish, *Lepomis macrochirus*: Streamwise vortex structure during steady swimming
08:40 55.3 (DVM) SCHAEFER, Justin T, KOOB, Thomas J, LONG, JR., John H; Bending mechanics of elasmobranch vertebral columns
09:00 55.4 (DVM) DANOS, N., BRAINERD, E.L.; Biomechanics of the skin during swimming in the American Eel, *Anguilla rostrata*.
09:20 55.5 (DVM) KOROBOV, N, BRAINERD, EL, MADDEN, P, LAUDER, GV; Novel pectoral fin kinematics during steady swimming in a benthic fish, the Longhorn sculpin, *Myoxocephalus octodecimspinosus*
09:40 55.6 (DVM) FISH, F.E., NUSBAUM, M.K., BENESKI, J.T., KETTEN, D.R., WILLIAMS, T.M.; Dolphin flukes as passively self-adjusting flexible propulsors

56 (Room Ireland B) Hydrodynamics - Acceleration

Co-chairs: F. Fish & S. Vogel

10:20 56.1 (DVM) LAPPIN, A.K., PILARSKI, J.Q., PIEROTTI, D.J., HEMPLEMAN, S.C., NISHIKAWA, K.C.; Neuromechanical events that trigger ballistic prey capture in toads.

HELMUTH, BS, HILBISH, TJ; Ecological hindcasting of biogeographic responses to climate change in intertidal ecosystems

13:40 58.3 (DEE) MARIONI, N. K., TRACY, C. R., ZIMMERMAN, L. C.; Effects of declining lake levels on fish populations: Lahontan cutthroat trout and tui chub in Walker Lake, NV

14:00 58.4 (DEE) NISHIGUCHI, M.K.; JONES, B.W.; Population dynamics of sepiolid squid-*Vibrio* mutualism from the Indo-west Pacific

14:20 58.5 (DSEB) WILSON, N.G., HALANYCH, K.M.; Underestimates of Antarctic biodiversity: phylogeography of the Antarctic crinoid *Promachocrinus kerguelensis*

59 (Room Sapphire) Behavioral Plasticity

Chair: S. MacDougall-Shackleton

13:20 59.1 (DAB) CHRISTY, J.H., RISSANEN, J.R., BACKWELL, P.R.Y.; A One-day Pause in the Biweekly Courtship Cycle of a Tropical Fiddler Crab Allows Females to Avoid Releasing Larvae During Twilight

13:40 59.2 JOHNSON, M. A.; Does Where an Animal Lives Determine Its Behavior? The Role of Microhabitat in Lizard Territoriality

14:00 59.3 (DAB) FONTAINE, JOSEPH/J, MARTIN, THOMAS/E; Reproductive responses to experimentally reduced nest predation risk

14:20 59.4 (DAB) LEE, DN, TANG-MARTINEZ, Z; of Early Social Environment on the Physical Development of Prairie Voles

14:40 59.5 (DEE) SNELL-ROOD, Emilie C; Developmental costs of behavioral plasticity: exploration during oviposition-cue learning in butterflies (Lepidoptera: Pieridae)

60 (Room Emerald) Comparative Neurobiology

Chair: J. Newcomb

13:00 60.1 (DIZ) HOCHBERG, R; Immunohistochemistry and 3-D cerebral architecture in species of *Asplanchna* (Rotifera)

- 13:20 60.2 (DNB)** BALTZLEY, MJ, LOHMANN, KJ; Evolution of a neural circuit in sea slugs
- 13:40 60.3 (DNB)** NEWCOMB, J.M.*, KATZ, P.S.; Patterns of neural evolution in nudibranch molluscs: functional divergence of homologous neurons embedded in a common neural network
- 14:00 60.4 (DNB)** TURNER, A.C., DASARI, S., COOPER, R.L.; Influence of the Dopamine and Serotonergic System on Physiology, Development and Behavior of *Drosophila melanogaster*
- 14:20 60.5 (DNB)** VON DER OHE, C.G., DARIAN-SMITH, C, HELLER, H.C.; Neural Plasticity in Hibernation
- 14:40 60.6 (DNB)** BELANGER, RM, MCDOWELL, KE, MOORE, PA, ZIELINSKI, BS; Reproductive significance and sensory hair morphology of the major chelae of male crayfish *Orconectes rusticus*

61 (Room Scotland C) Comparative Evolutionary Morphology II

Chair: J. Hanken

- 13:20 61.1 (DVM)** GROSS, J.B., HANKEN, J.; Embryonic origin of adult cranial cartilages in *Xenopus*: A view from the crest.
- 13:40 61.2 (DVM)** HANKEN, J., GROSS, J.B.; Fate maps evolve, too: neural crest derivation of the bony skull in frogs, revealed by transgenic labeling
- 14:00 61.3 (DVM)** CLAESON*, Kerin M., LUNDBERG, John G.; Micro Catfish Micro CATscans
- 14:20 61.4** BLACKBURN, D.C.; The effect of miniaturization on skeletal morphology within the African frog family Arthroleptidae
- 14:40 61.5** MILLER, G., ANGIELCZYK, K.D.; Geometric Morphometric Analysis of Shell Kinesis in Emydine Turtles

62 (Room Ireland A) Flight Aerodynamics II

Co-chairs: S. Swartz & S. Combes

- 13:00 62.1 (DVM)** SWARTZ, S, GALVAO, R, IRIARTE-DIAZ, J, ISRAELI, E, MIDDLETON, K, ROEMER, R; Unique characteristics of aerodynamics of bat flight: evidence from direct visualization of patterns of airflow in the wakes of naturally flying bats
- 13:20 62.2 (DIZ)** COMBES, S.A., DUDLEY, R.; Limits to maximum flight velocity: Pitch control and roll instability in orchid bees during fast, forward flight
- 13:40 62.3** BUNDLE, M/W, DIAL, K/P; Power requirements of bird flight with additional mass
- 14:00 62.4 (DVM)** BERG, A.M., BIEWENER, A.A.; Differences among Ascending, Level, and Descending Flapping Flight
- 14:20 62.5 (DCPB)** BREWER, Michael/L, CHEVIRON,

- 13:40 64.2** BROWN, FD, SWALLA, BJ; Germ Cells and *Vasa* Expression in Ascidians
- 14:00 64.3 (DEDB)** GALIS, F., VAN DOOREN, T.J.M., METZ, J.A.J., WITKAM, A., WIJNAENDTS, L.C.D.; The coordinated patterning of the embryonic axes and the conservation of the seven cervical vertebrae
- 14:20 64.4** GIRIBET, G., EDGECOMBE, G.D., KRISTENSEN, R.M., MARTINDALE, M.Q., SEAVER, E.C., SORESENSEN, M.V.; Assembling the Protostome Tree of Life

65 (Room Great Hall West) Complementary to Metamorphosis Symposium

Chair: E. Crespi

- 13:00 65.1 (DEE)** REITZEL, A.M., SULLIVAN, J.C., FINNERTY, J.R.; Metamorphosis in the Life History of a Parasitic Sea Anemone, *Edwardsiella lineata*
- 13:20 65.2** EDWARDS, T.M., MOORE, B.C., GUILLETTE, L.J.; Metamorphic Sex Change: Evolutionary Insight for Endocrine Disruption Studies
- 13:40 65.3 (DCE)** MILLER, MF, OKADA, R, ITO, Y, DE GROEF, B, YAMAMOTO, K, DENVER, RJ; Involvement of the corticotropin-releasing factor (CRF) type 2 receptor in CRF-induced thyrotropin release from the tadpole pituitary.
- 14:00 65.4 (DEE)** MCCOY, Krista A, AMICK, Alison M; Metamorphosis and reproductive growth and development
- 14:20 65.5 (DCE)** CRESPI, Erica J, DENVER, Robert J; Conserved and novel functions of leptin in the South African clawed frog (*Xenopus laevis*)
- 14:40 65.6 (DCE)** BAKER, M.E.; Role of the Environment on the Evolution of Signal Transduction Proteins and Metamorphosis

Zac/A, BRUMFIELD, Robb/T, ROBERTS, Stephen/P ;
Altitudinal variation of wing shape in the Andean passerine
Zonotrichia capensis
14:40 62.6 (DVM) PADIAN, K., DIAL, K.P.; Was there a
"four-winged" transitional stage between dinosaurs and
birds?

63 (Room Ireland B) Feeding and Flow II

Chair: P. Wainwright

13:00 63.1 (DVM) CASE, J.E., MARSHALL, C.D.; Using
Morphology to Predict Feeding Behavior: A Preliminary
Study of Juvenile Red Snapper (*Lutjanus campechanus*)
Feeding

13:20 63.2 (DVM) VAN WASSENBERGH, S, HERREL,
A, ADRIAENS, D, AERTS, P; Terrestrial feeding in the eel
catfish, *Channallabes apus*

13:40 63.3 MARKEY, M. J., MAIN, R. P., MARSHALL,
C. R.; *In vivo* cranial suture function and suture morphology
in the extant fish *Polypterus*

14:00 63.4 (DVM) DAY, S W, HIGHAM, T E,
WAINWRIGHT, P C; THE RELATION OF SUCTION
PRESSURE AND FLUID SPEED DURING FEEDING IN
LARGEMOUTH BASS

14:20 63.5 (DVM) FRANCIS, A.W.; Phylogeny and
Feeding Biomechanics of Pleuronectiform Fishes

14:40 63.6 (DCPB) RICE, Aaron N.; Evolution of
Coordination in Fish Feeding: The Intersection of
Functional Morphology and Ecology

64 (Room Great Hall East) Complementary to Mesoderm Symposium

Chair: G. Giribet

13:20 64.1 (DEDB) LIVINGSTON, BT, HARMON, M;
Development of the skeletogenic mesoderm in the
Ophiuroid *Ophiocoma wendtii*